

IOWN INTEGRAL

NTT R&D FORUM 2024

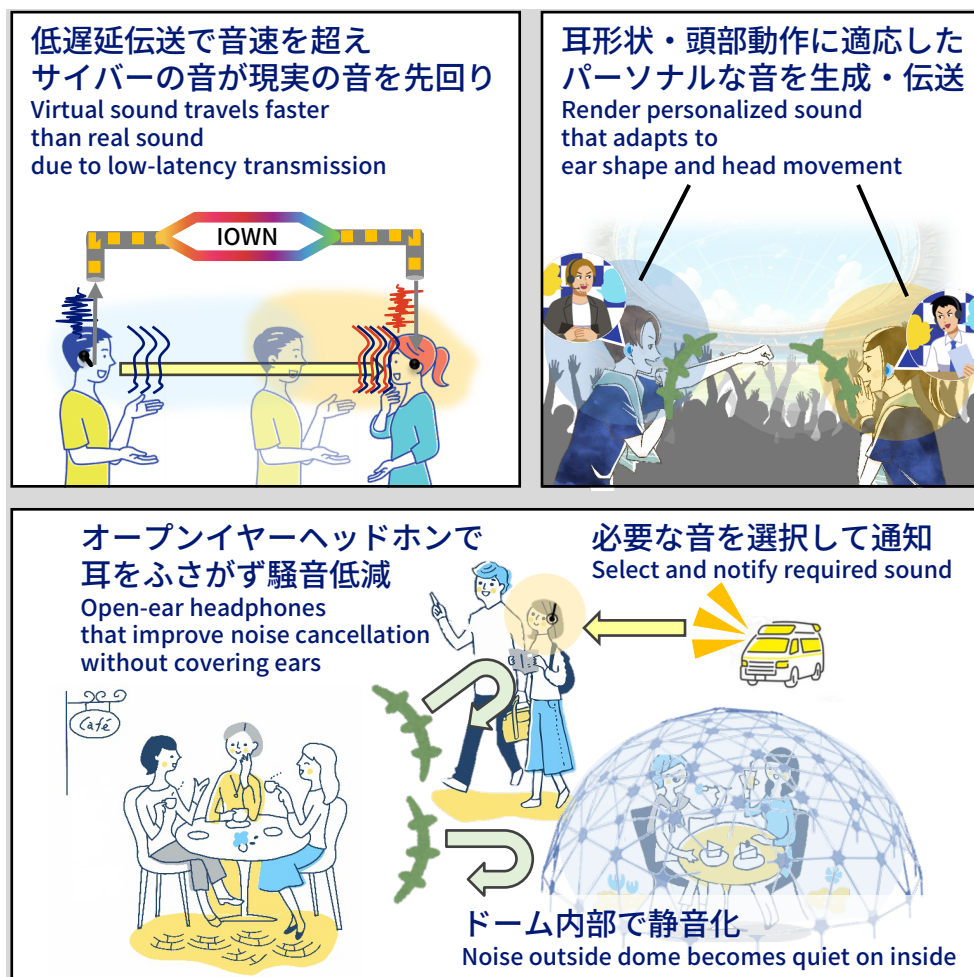
RESEARCH

γ 05-01

Personalized Sound Zone (PSZ)

Sound at performance venue is altered
to enhance comfort and mood

#Customer Experience Value Creation #Well-being, Human Capital Management



///Technical Issue

Altering the sound of reality so that different people can engage in activities safely, comfortably, and happily is difficult.

///Research Goal

Evolving events and facilities through devices and media processing that optimize sound within a specific real-world space.

---Technology

Acoustic XR expresses moving sound by adapting to ear shape and head movement. Sound SyReal emphasizes or suppresses difference between sound from earphones and sound in venue, enriching sound of reality. Active noise control expands quiet spaces without blocking ears.

---Applicable Business

Service will be provided from 2025 onward in entertainment, tourism, and event industries

- New sightseeing, appreciation, and spectator where you listen to XR audio guide while feeling atmosphere of venue at stadium/arena, stage, or museum.
- Comfortable conversations in cafes, crowds, or workplaces, with necessary sounds being easier to hear.

---Novelty

- First application of a low-latency data transfer technology to acoustic data.
- Only PSZ can alter sound of reality by matching sound from earphones to sound in venue down to wavefront.
- First open-ear design to improve noise cancellation.