R&D phase | Research **Expected Commercialization** | FY28-

Mehr Licht!
More Photonics for Intelligence

#C05

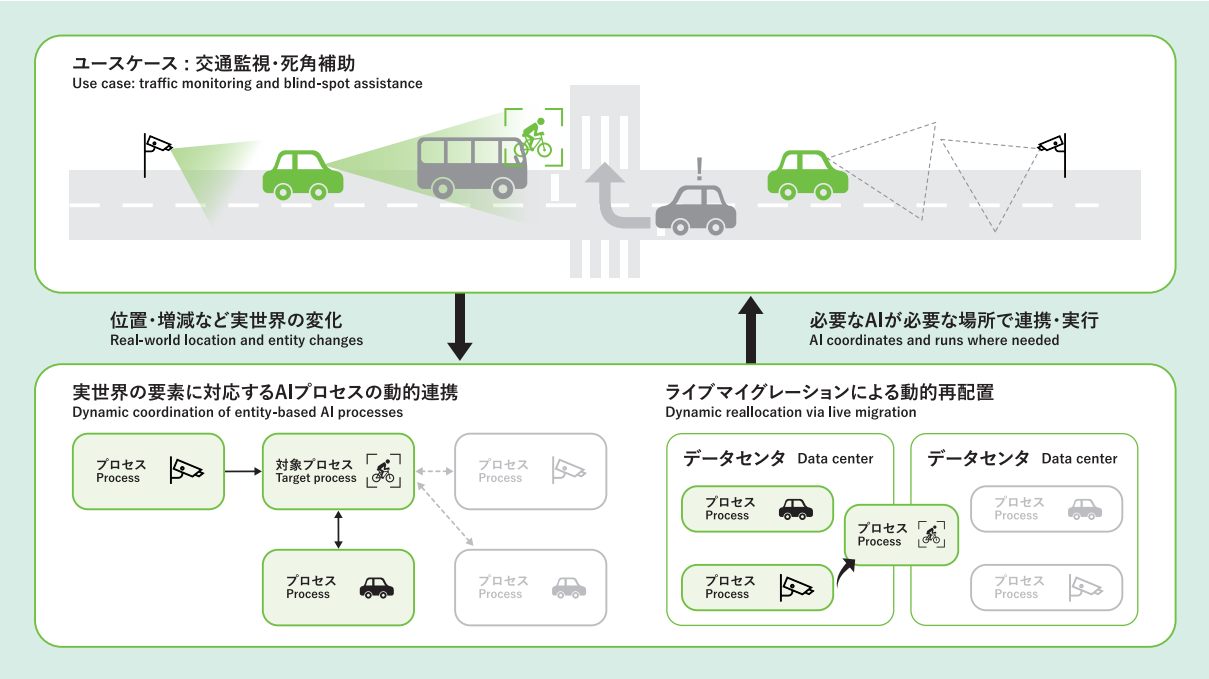
#AI & Quantum Infrastructure#Digital & AI Transformation

Dynamic AI Coordination and Redeployment

AI processes collaborate on efficient video analysis for safer roads

Technical Challenges & Goals

Vehicle and roadside cameras are increasingly used for traffic safety. As vehicles and targets move or vary, AI processing and links change locally and constantly, complicating management and resource use. Adapting AI links and execution locations to real-world changes enables safer traffic and efficient computing.



Key Technologies

Core Technologies

- Distributed stateful AI processes mapped to real-world entities, with adaptive coordination
- Continuous optimization of AI process placement via state-preserving live migration

Key Differentiators

- Unlike centralized processing, entity-based AI processes dynamically link and run needed tasks
- Unlike fixed placement, AI processes migrate live and continuously optimize execution location

Use Cases

Smart City

Traffic monitoring and safety services by municipalities, road operators, and automakers use vehicle and roadside camera AI that coordinates and relocates as conditions change, keeping blind spots covered for safer, more efficient roads.

Exhibitors

NTT, Inc. Center For Computing Technologies