R&D phase | Research **Expected Commercialization** | FY27-

Mehr Licht!
More Photonics for Intelligence

#B19

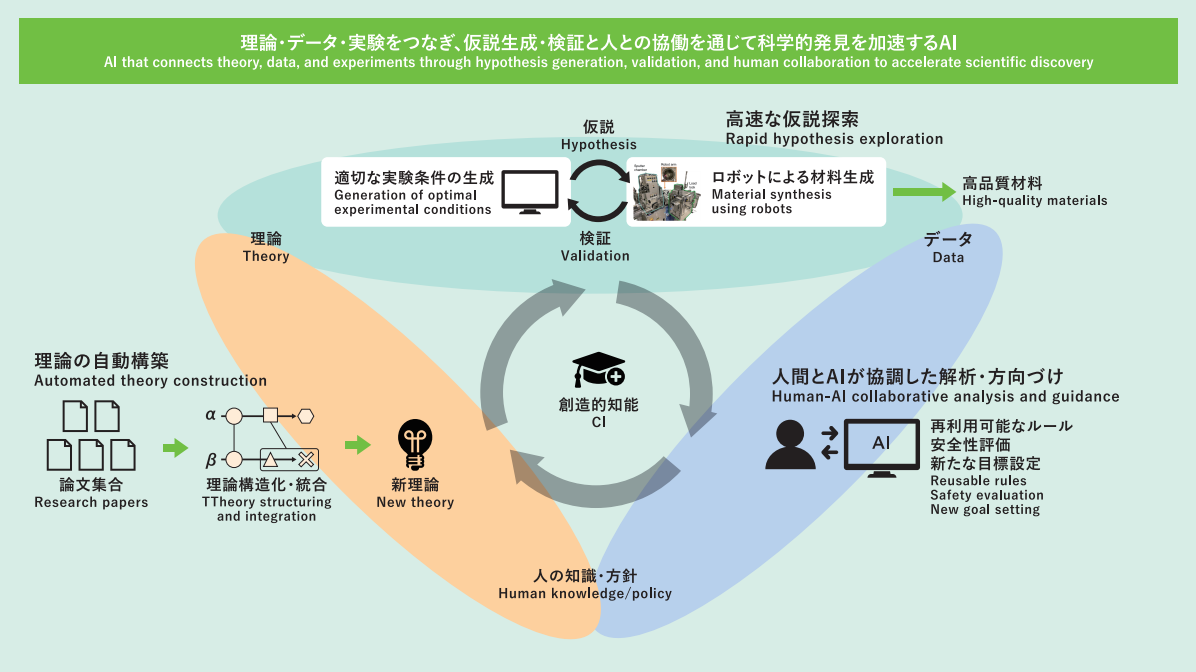
#AI & Quantum Infrastructure#Digital & AI Transformation

AI4S Based on “Creative Intelligence”

Accelerating scientific discoveries by human-AI collaboration

Technical Challenges & Goals

Scientific discovery and the practical application of new technologies require time-consuming cycles of hypothesis and testing. The current AI still struggles to create new ideas or safely incorporate human insights into reliable solutions. Solving these challenges can accelerate discovery and technological innovation.



Key Technologies

Core Technologies

- Creative Intelligence: AI that collaborates with humans to create new knowledge
- Extracting reusable knowledge from data collected through autonomous experimentation

Key Differentiators

- It provides a continuous cycle of theory building, hypothesis exploration, and human guidance
- It can acquire reusable knowledge that informs future experiments

Use Cases

Manufacturing

AI and automated experimentation enable rapid exploration of material compositions and synthesis conditions, accelerating the discovery of optimal materials and manufacturing processes.

Exhibitors

NTT, Inc. Communication Science Laboratories
NTT, Inc. Human Informatics Laboratories
NTT, Inc. Computer and Data Science Laboratories
NTT, Inc. Basic Research Laboratories

CONTACT：Innovative Communication Laboratory