**R&D phase** | Research **Expected Commercialization** | FY30-

Mehr Licht!
More Photonics for Intelligence

#D05

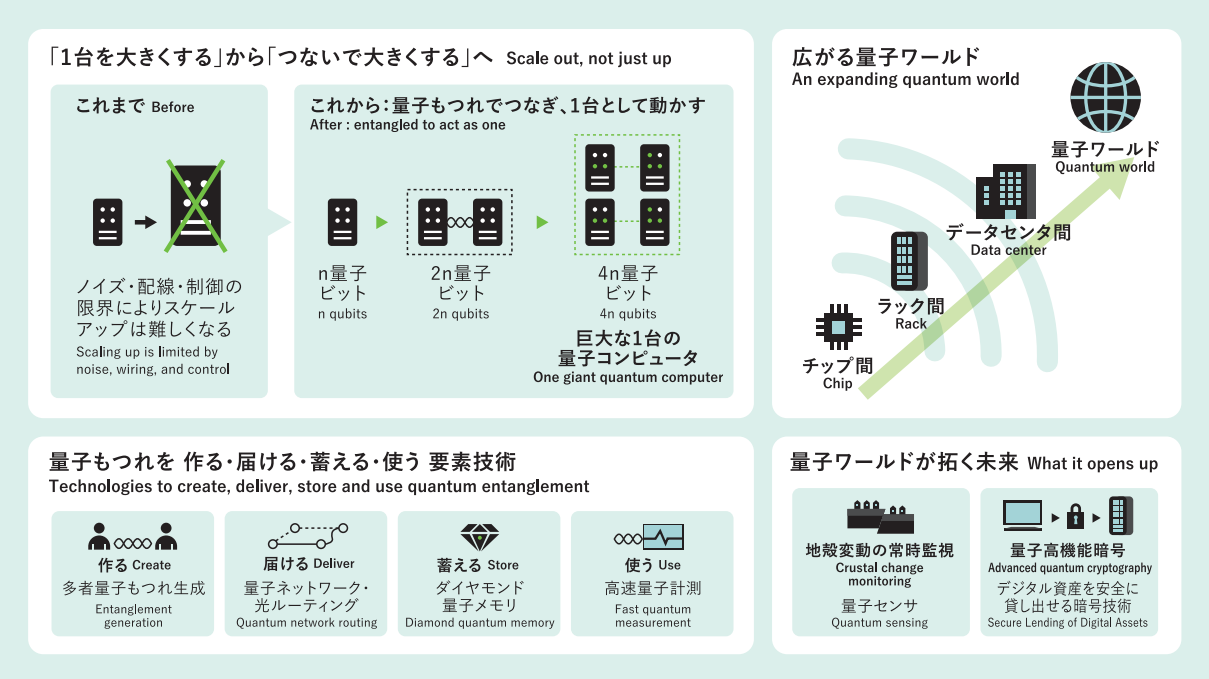
#AI & Quantum Infrastructure#Cybersecurity#Resilience

# Connecting Quantum Computers and Beyond

Entanglement scales from chips to racks to data centers to the world

## Technical Challenges & Goals

Large-scale computation beyond a single quantum computer requires multiple systems to work together. We aim to achieve distributed quantum computing by linking computers through quantum communication that generates, delivers, stores, and uses quantum entanglement, thus expanding computational power.




## Key Technologies

### Core Technologies

- Multipartite entanglement generation, NV-center quantum interfaces, fast quantum measurement

### Key Differentiators

- End-to-end technologies for generating, distributing, storing, and using quantum entanglement

## Use Cases

**Information Technology (IT)**

Our distributed quantum computing platform links quantum computers via quantum networks to share entanglement across machines, overcoming single-machine limits for large-scale computing in drug discovery, catalysis, materials, and finance.

**Exhibitors**

NTT, Inc. Network Innovation Laboratories
NTT, Inc. Network Service Systems Laboratories
NTT, Inc. Social Informatics Laboratories

CONTACT：Frontier Communication Laboratory