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EPB Overview

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About EPB

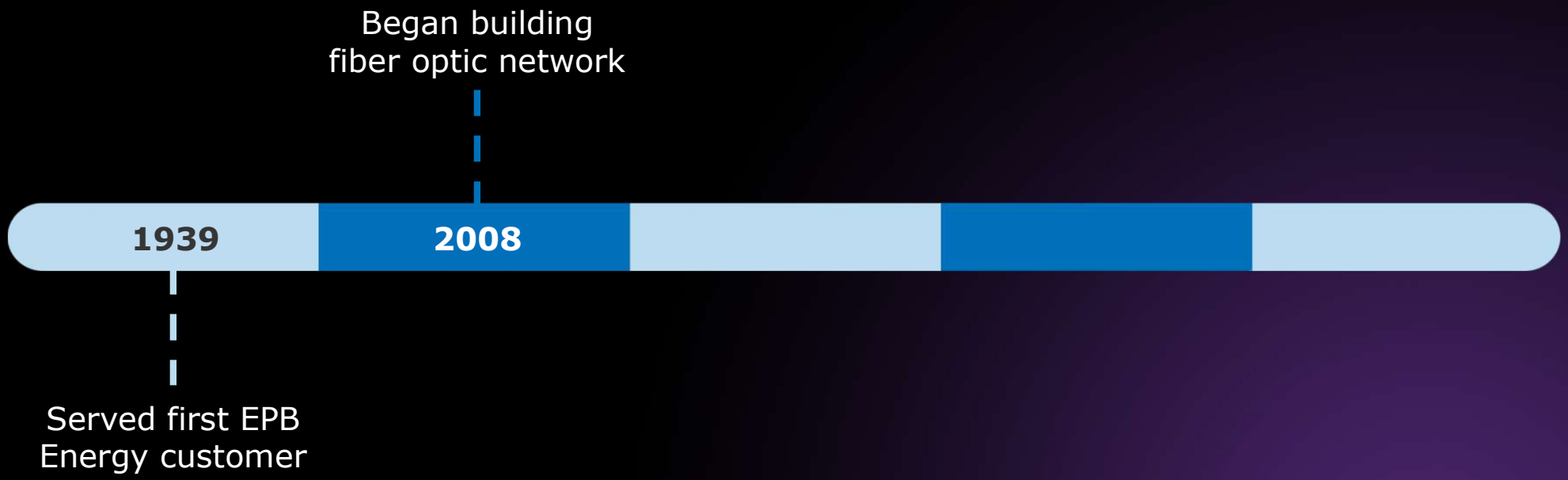
- One of the largest municipal utilities in U.S.
- Currently serving 200,000+ energy meters and 130,000+ fiber customers
- America’s most resilient advanced grid system
- J.D. Power’s #1 electric utility in the south for ten consecutive years

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EPB History

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Over 80 years of History

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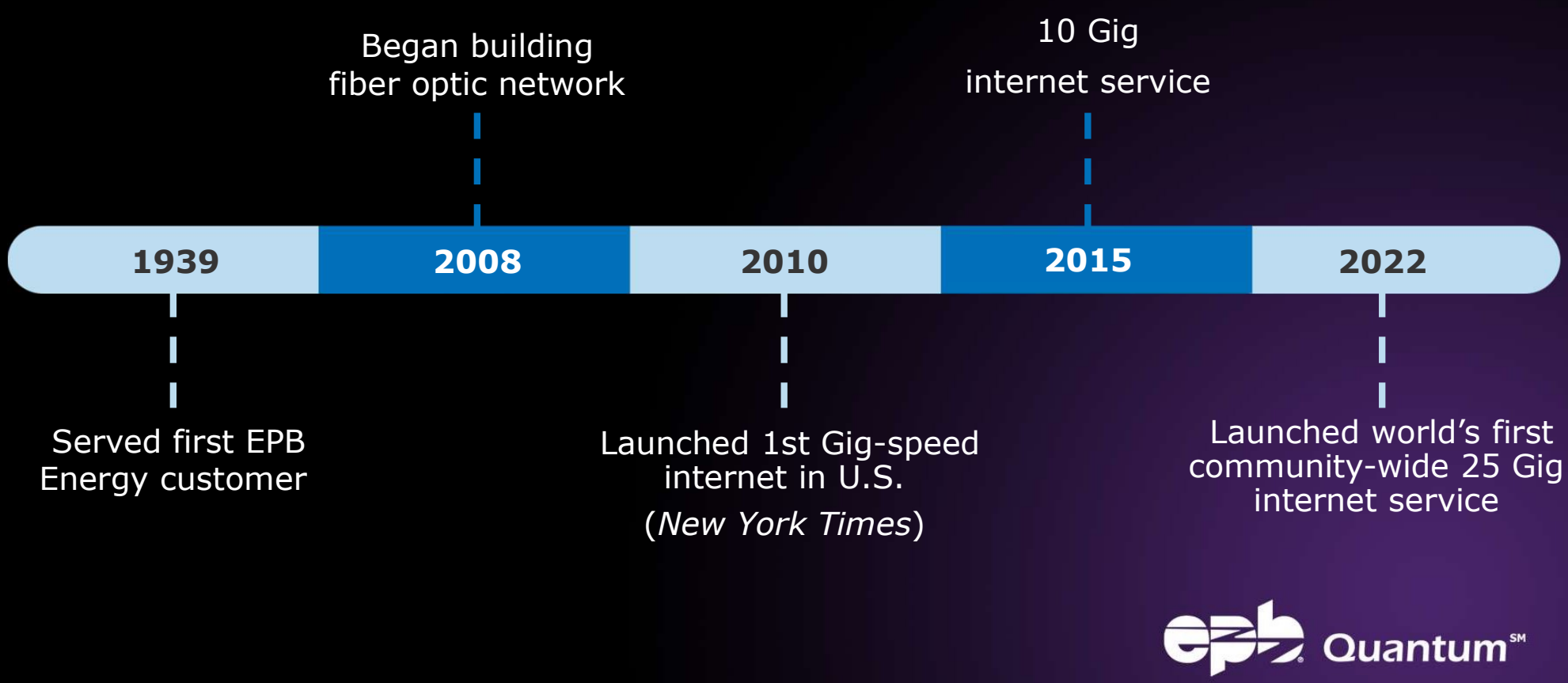
1998



2007



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Began building
fiber optic network
10 Gig
internet service
1939
2008
2010
2015
2022
Served first EPB
Energy customer
Launched 1st Gig-speed
internet in U.S.
(*New York Times*)
Launched world's first
community-wide 25 Gig
internet service
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Community Benefits

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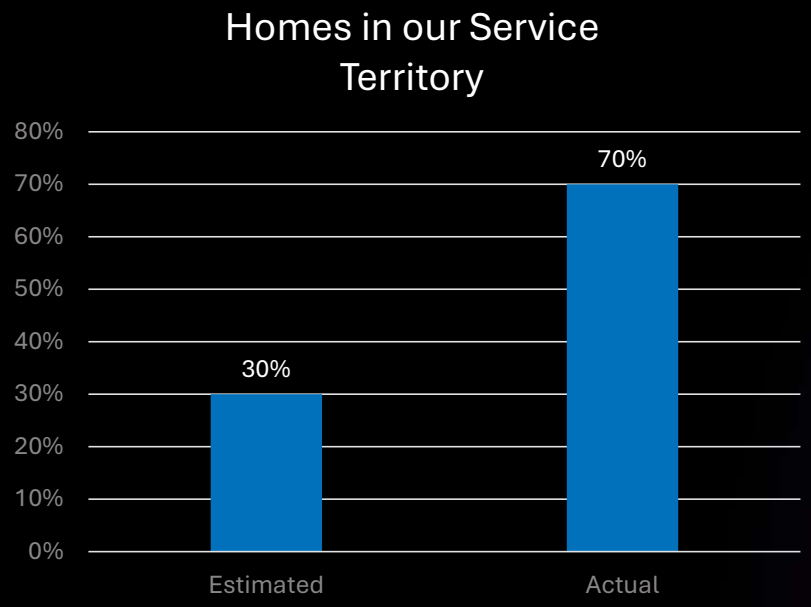
Community Benefits From Fiber

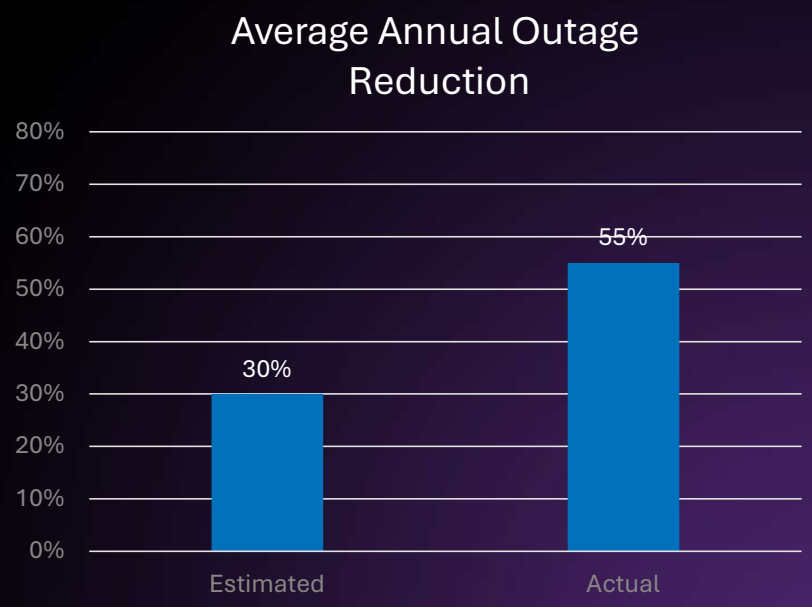
30%
Homes in our Territory

30%
Annual Outage Reduction

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Community Benefits From Fiber





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Community Benefits From Fiber



#Pandemic

1. **Remote work**
   - 75% increase in internet usage
   - Best places to work from home
2. **Remote schooling**
   - All students need to access internet
   - HCS EdConnect: reaches 28,000 students and family

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Community Benefits From Fiber



Independent Study in 2025:

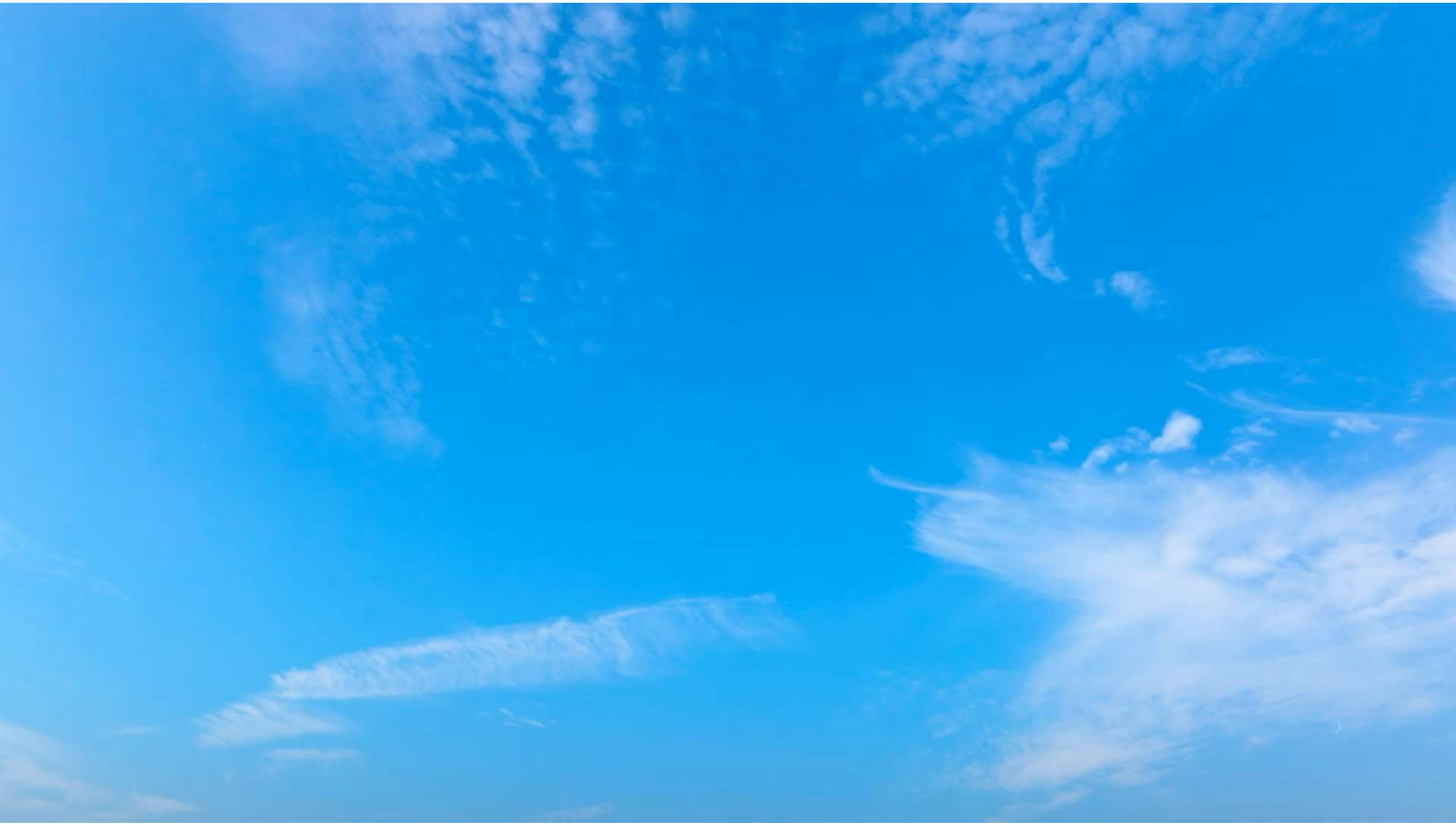
- $5.3 billion community benefit
- 10,000+ jobs

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Quantum

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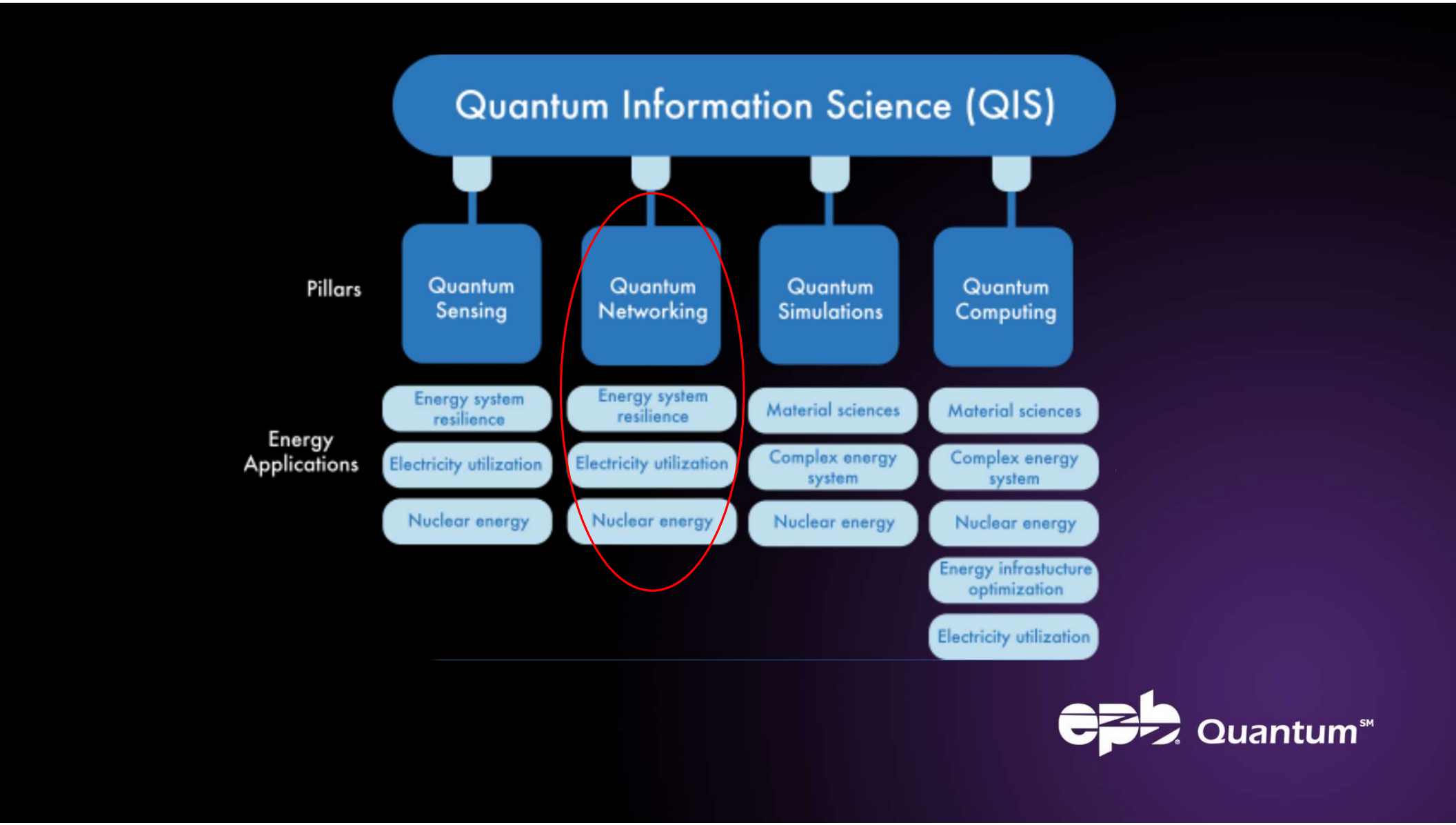


Award-winning Expertise

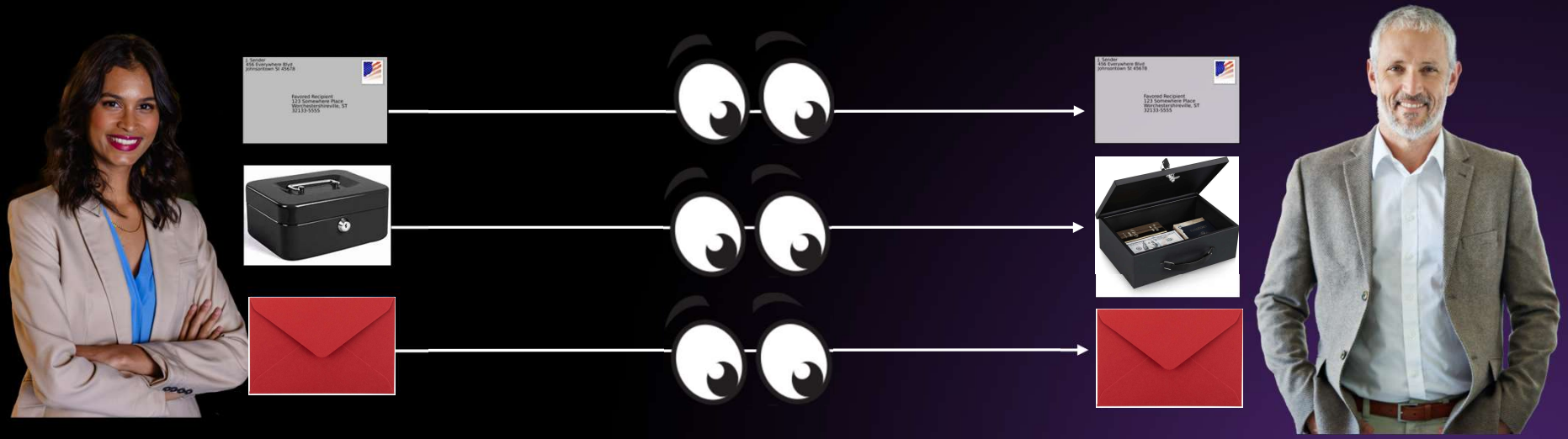
2021 R&D 100 WINNER

EDISON AWARDS GOLD 2022 WINNER

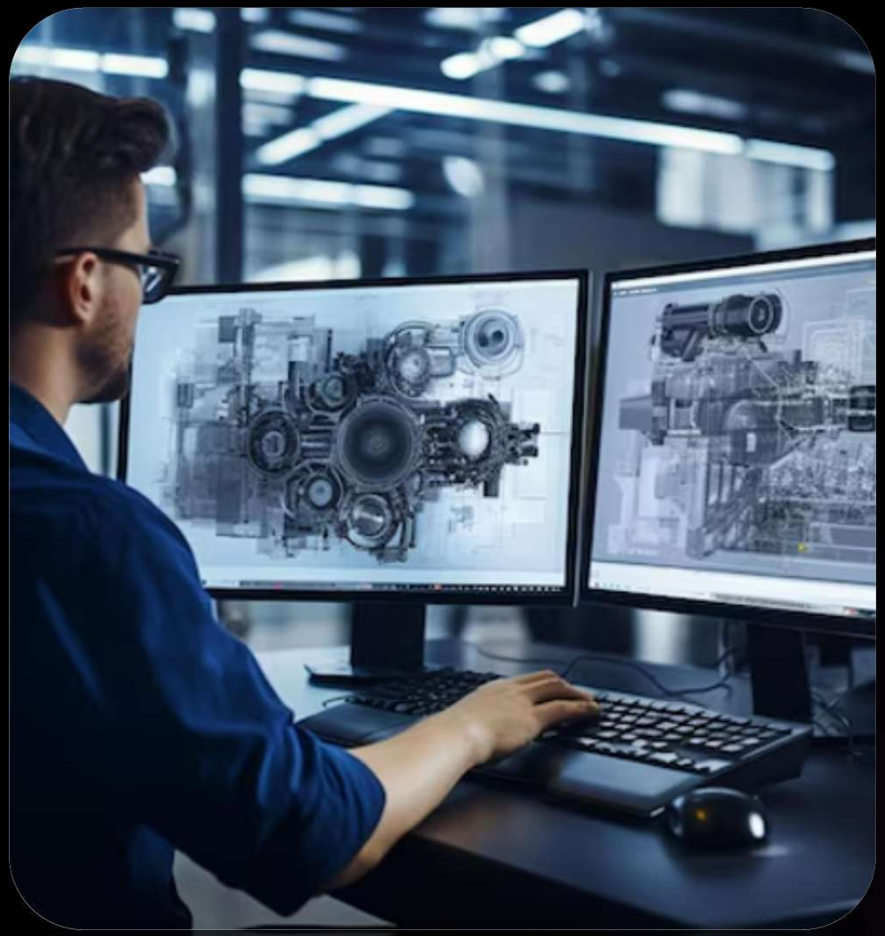
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Quantum Information Science (QIS)
Pillars
Quantum Sensing
Quantum Networking
Quantum Simulations
Quantum Computing
Energy Applications
Energy system resilience
Electricity utilization
Nuclear energy
Energy system resilience
Electricity utilization
Nuclear energy
Material sciences
Complex energy system
Nuclear energy
Material sciences
Complex energy system
Nuclear energy
Energy infrastucture optimization
Electricity utilization
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Classical vs. Quantum Networks



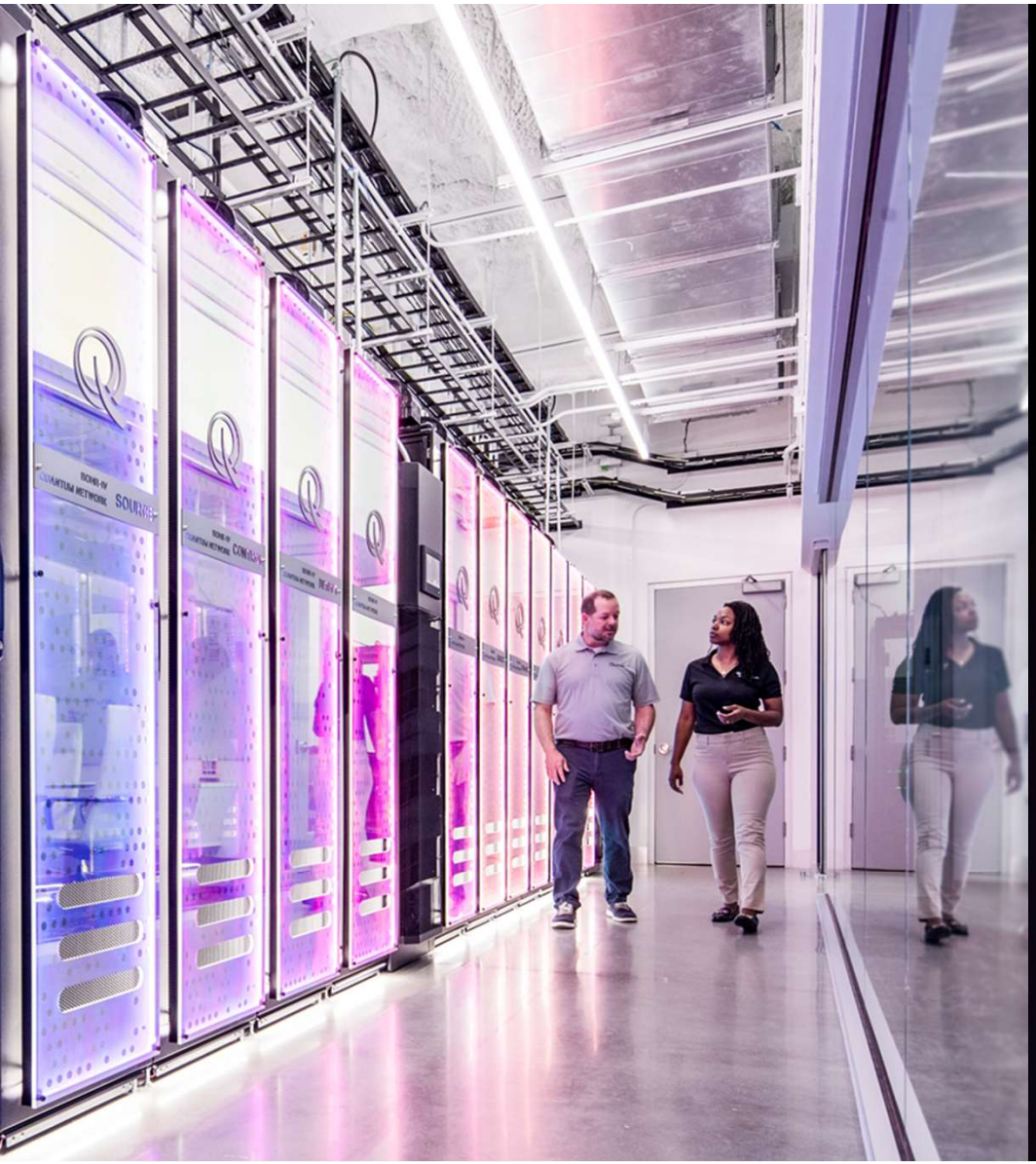
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Quantum Communications

- Secure data transfer
- Prevent eavesdropping, tampering and hacking
- Safeguard intellectual property and proprietary product designs

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First commercially available quantum network in 2023.

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Meet our Quantum Networking Team



Patrick Swingle
Quantum
Systems Manager



Kirk McLemore
Strategic
Partnerships



Alex Miloshevsky
Quantum
Physicist

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Quantum Computing could deliver $2.7 trillion in Economic Value to companies worldwide by 2035.

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Chattanooga industries well-positioned

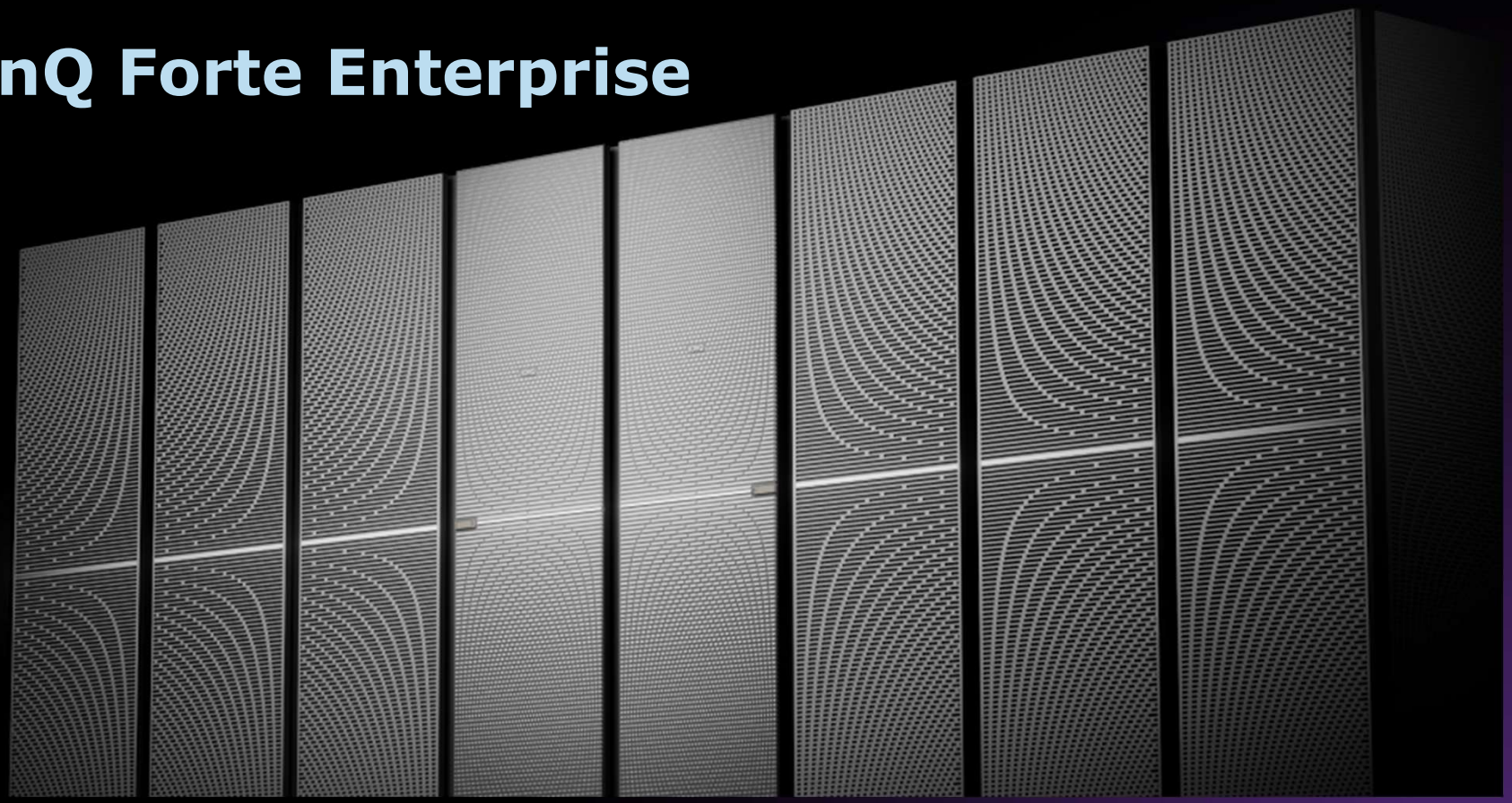


1. Economic value is defined as the additional revenue and saved costs that the application of QC can unlock. These industries are the most likely to realize this value earlier than other industries; therefore, they are examined in more depth.
2. Value estimates are approximative, not definitive projections for business value.
3. Sustainable energy market is expected to grow rapidly from 2022 to 2035. However, the 2035 market size is influenced by numerous factors and challenging to predict.

Source: Oxford Economics; McKinsey analysis

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IonQ Forte Enterprise



April 25, 2025
EPB Board approved purchase of a quantum computer

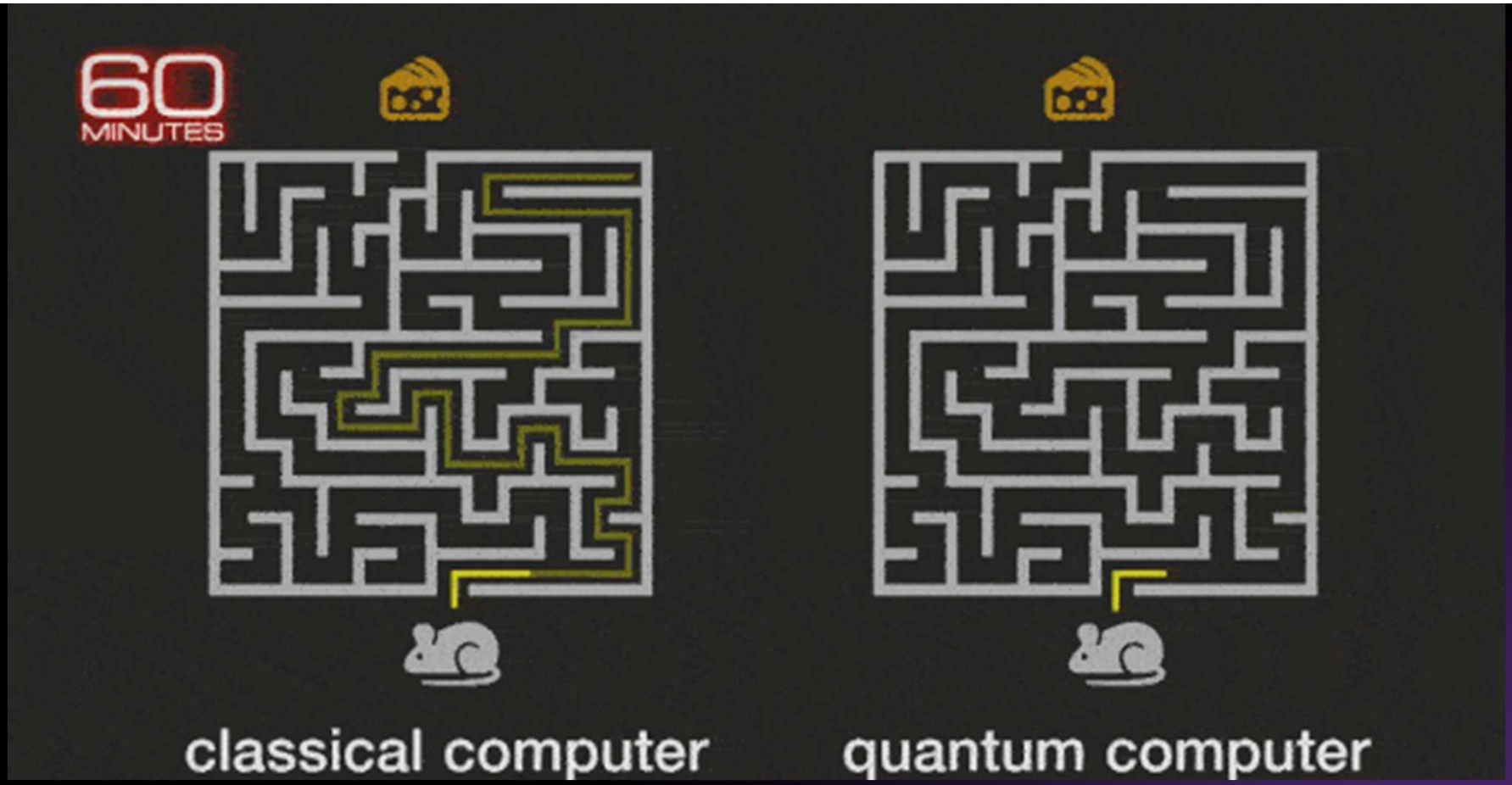
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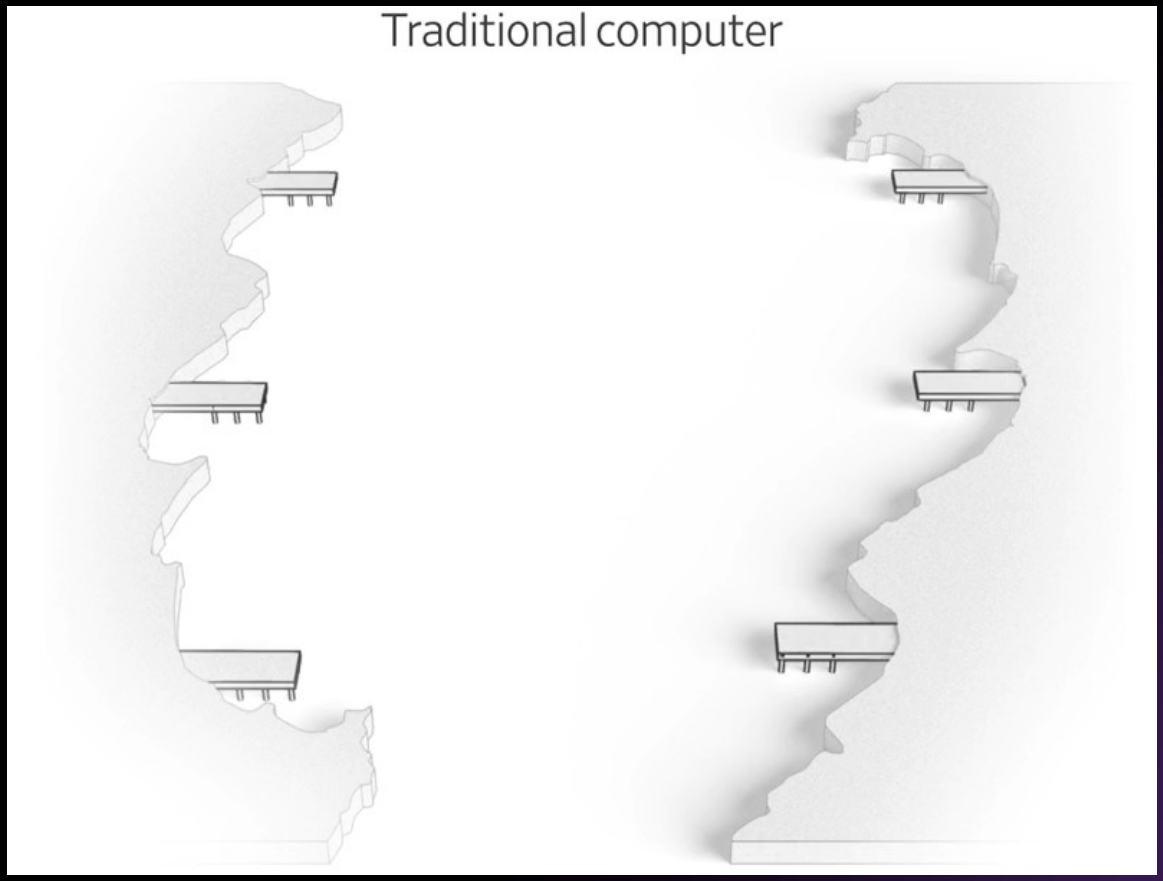
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Quantum Grid Applications

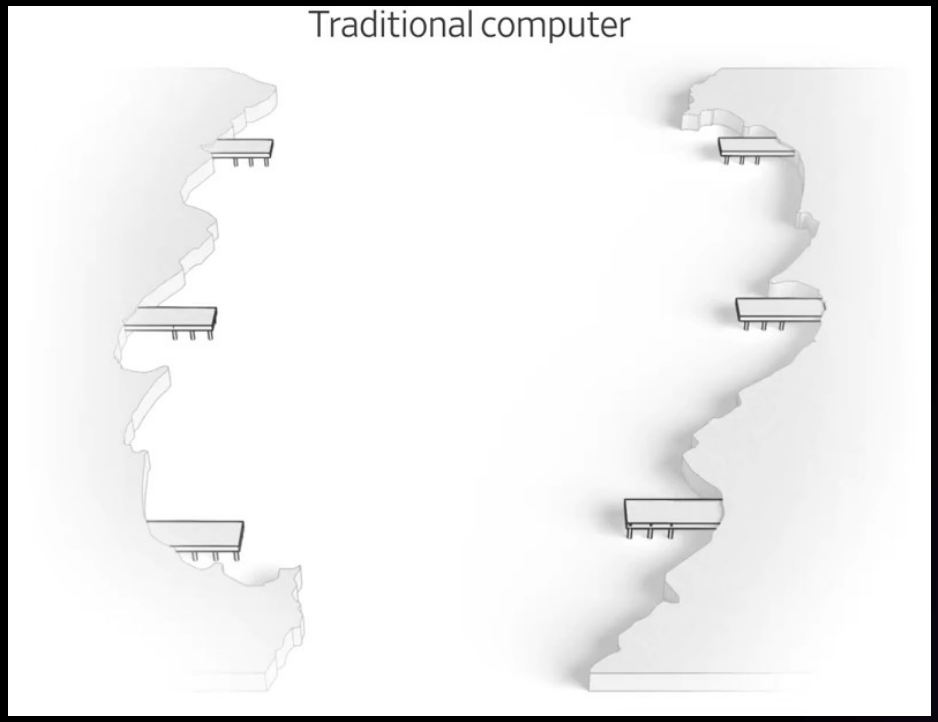
- Cybersecurity
- Grid Optimization
- Route Optimization
- Predictive Maintenance
- Local Energy Resource Management

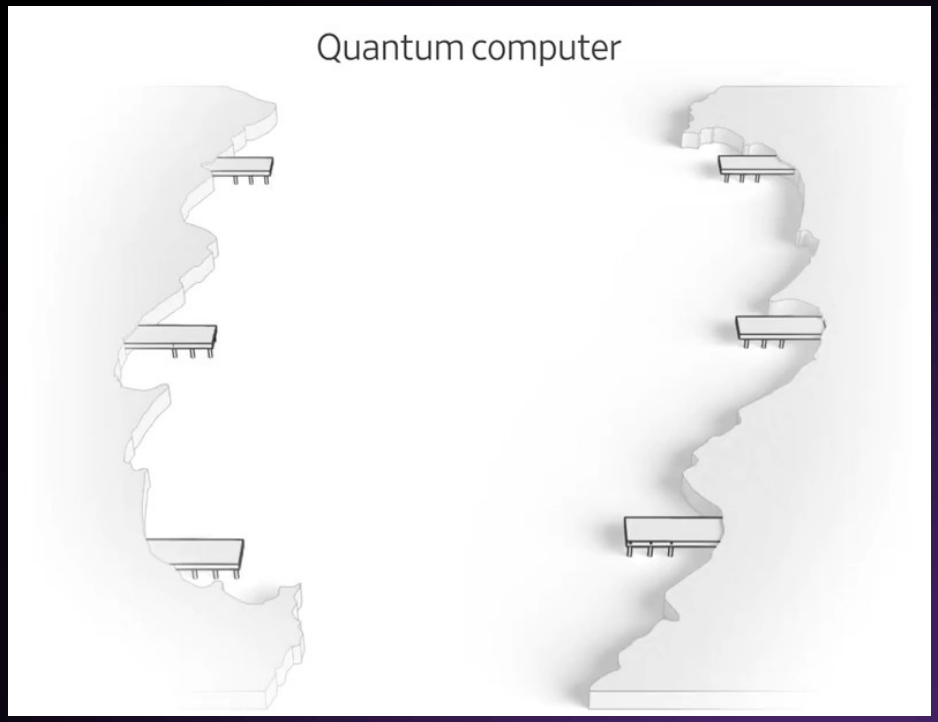


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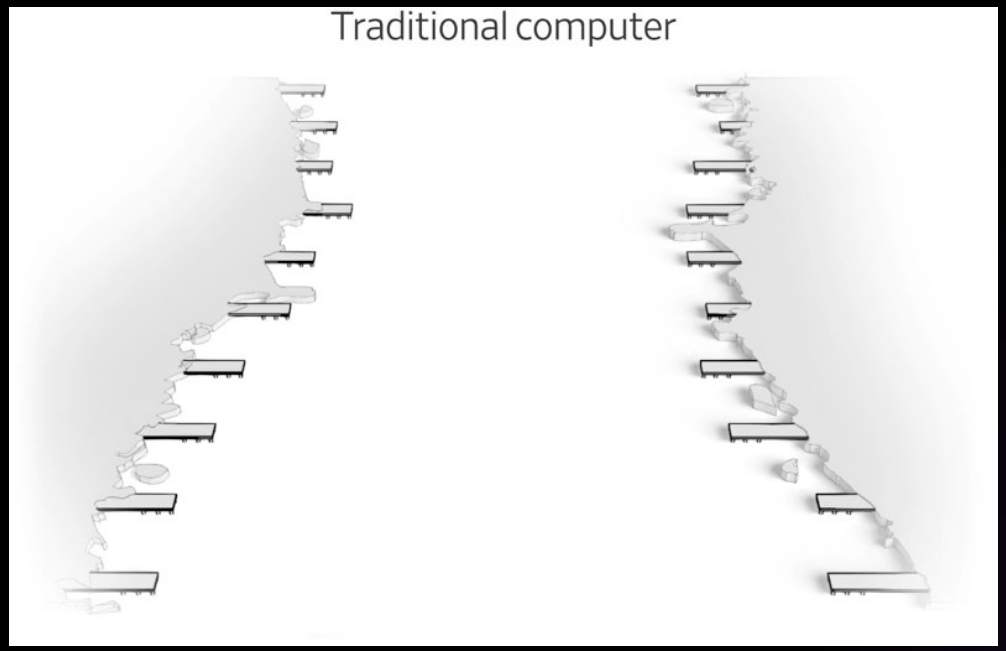
Source: Wall Street Journal

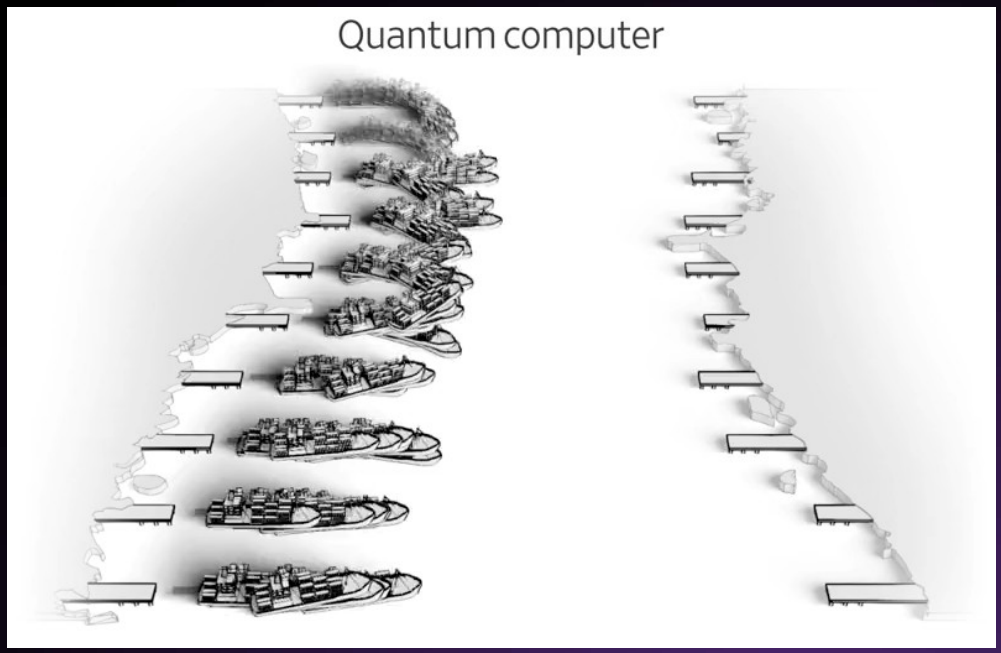




Source: Wall Street Journal

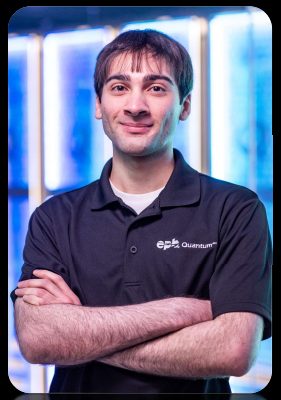
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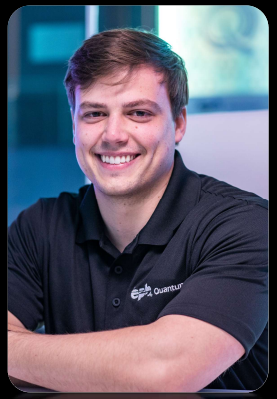


Source: Wall Street Journal

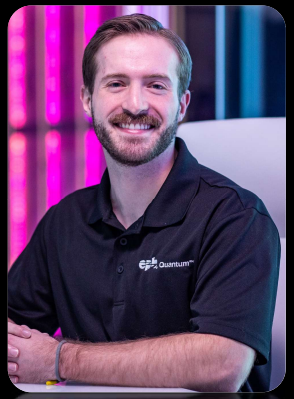
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Nowar Alashkar
Fellow



Mason Blanchard
Fellow



Noah Crum
Fellow



Daniel Germain
Fellow



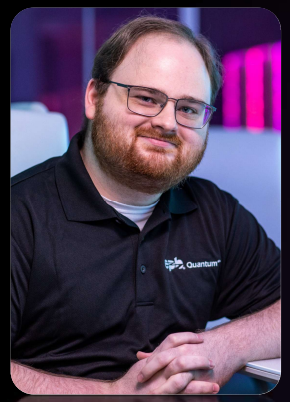
Paul Smith
Quantum Computing Manager



Cade Kennedy
Fellow



Pete Pritchard
Fellow

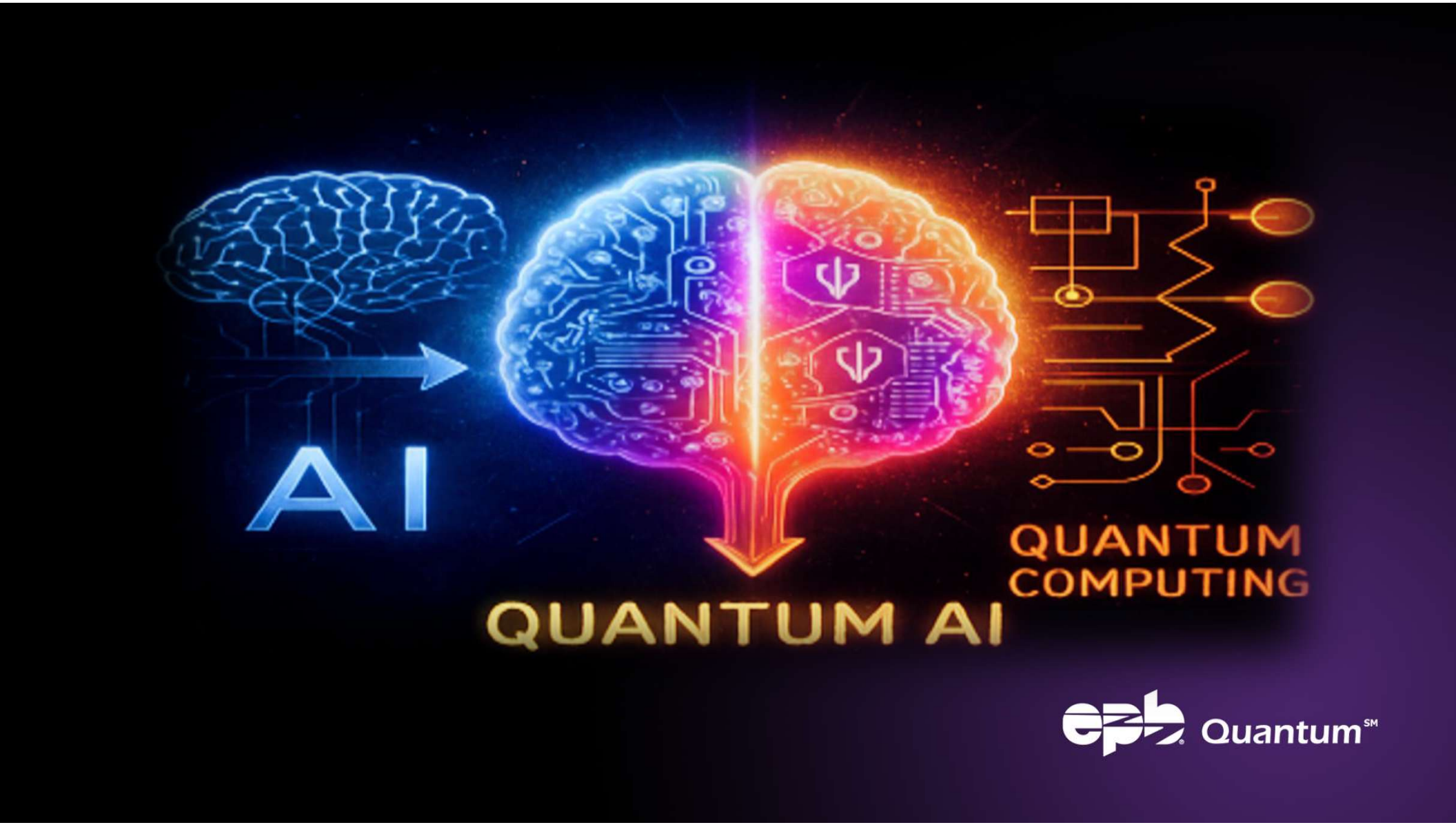


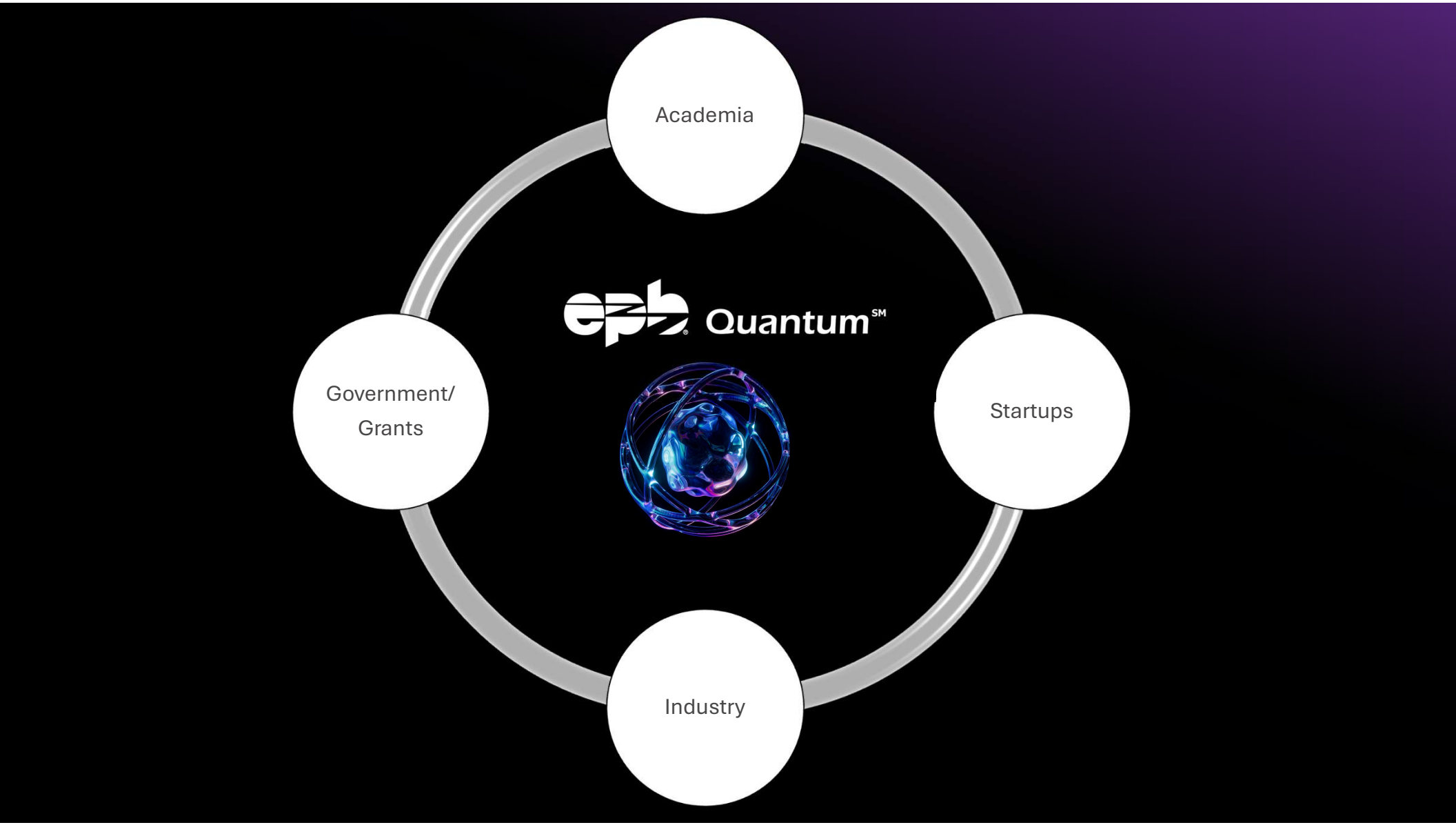
Tanner Rase
Fellow



Audrey Versteegen
Fellow

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AI
QUANTUM COMPUTING
QUANTUM AI
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Academia
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Government/
Grants
Startups
Industry

An Existing Chattanooga Quantum Ecosystem









2016

DOE, QKD Pilot (EPB, ORNL, Los Alamos & Qubitekk)

2023

EPB's first commercially available quantum network



UTC's Dedicated Q-Node



2025

EPB Board approves IonQ Quantum Computer

EPB & Vanderbilt announces Institute of Quantum Innovation and VU campus in Chattanooga



2026

IonQ opens Chattanooga office

TN QuantumWorks Announcement



IonQ Forte Enterprise Commissioning

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THE EDNEY


Quantum Internet
Transforming the way we live, work and play
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