



Session S05
Cybersecurity in the Quantum Age

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May 18, 2021

**GLOBAL
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SUMMIT**

EXPLORING NEW PERSPECTIVES

Encryption protects sensitive data



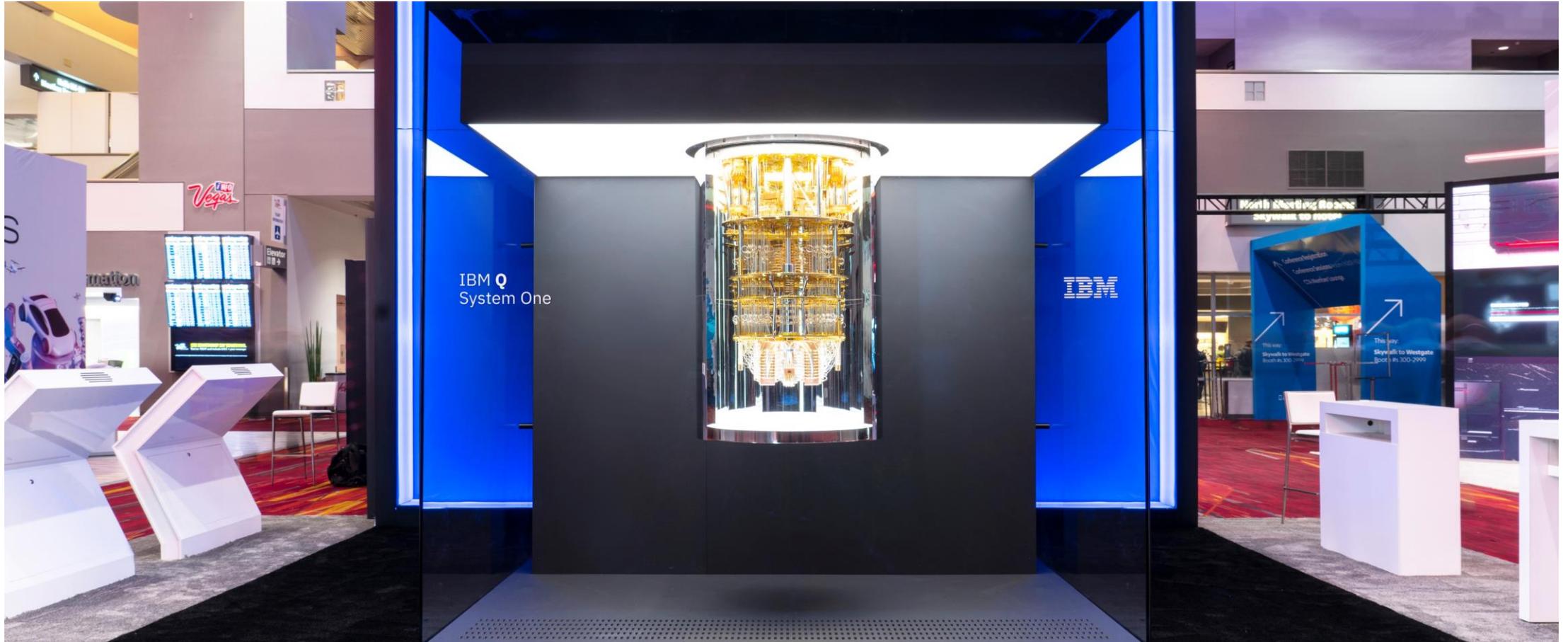
Freedom of the Press Foundation, [Edward-Snowden-FOPF-2014](#), CC BY 4.0

Encryption works.

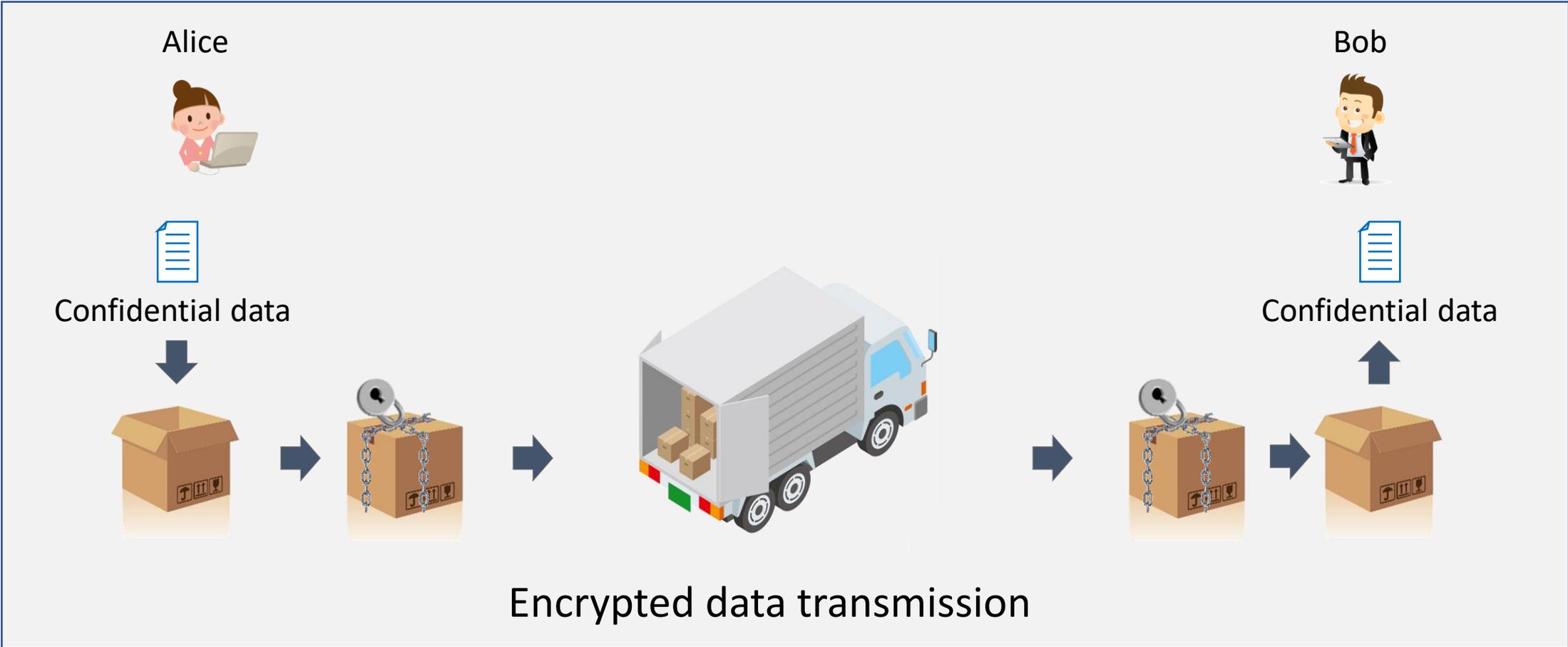
Properly implemented strong crypto systems are one of the few things that you can rely on.

Edward Snowden

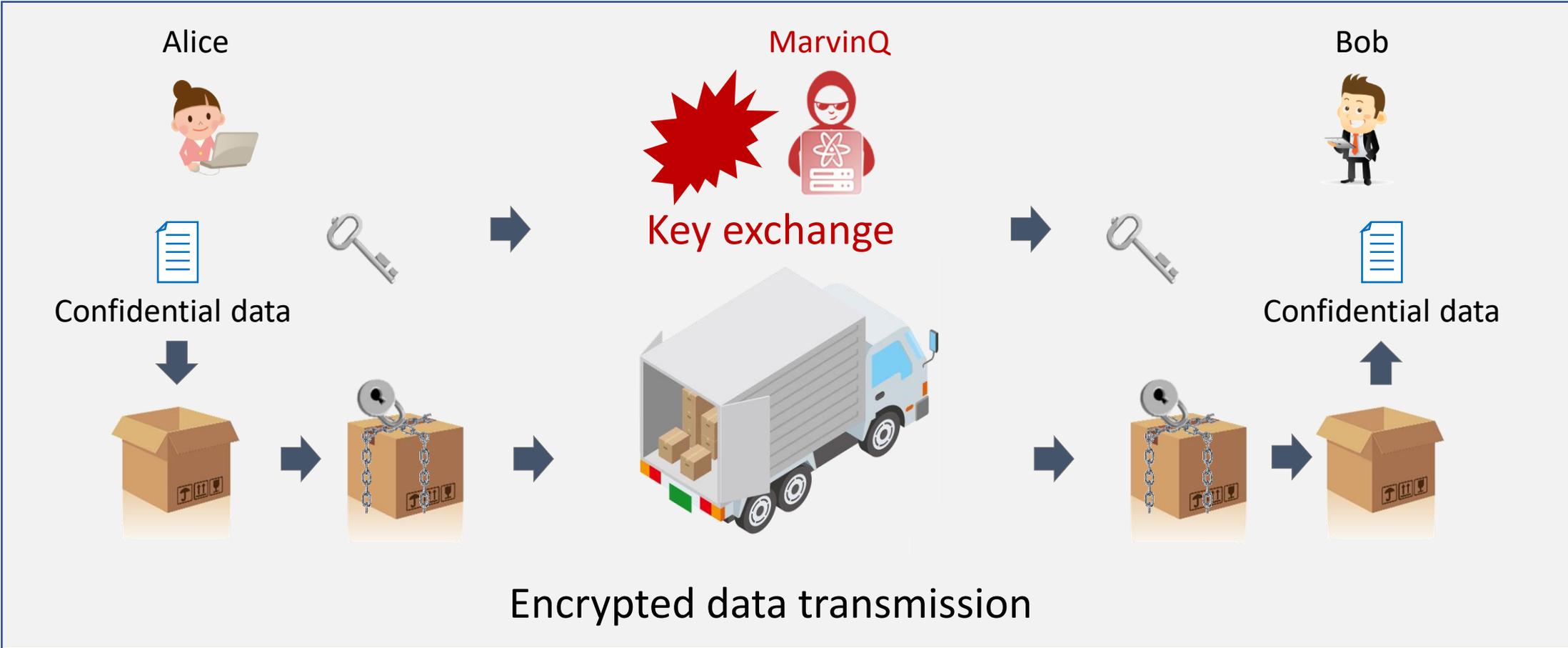
Quantum computers put encryption at risk



The key exchange is the weak link



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Security **despite** or **with** quantum technology?

Post-quantum cryptography (PQC)

- Is based on hardened algorithms
- Works with any communication channel
- Requires endpoint access only
- Is independent of an optical network

First line of defense

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Quantum key distribution (QKD)

- Is based on laws of quantum physics
- Needs optical fiber or free-space channel
- Requires access to physical infrastructure
- Depends on optical link performance

Additional protection

Protecting against tomorrow's threats today



< Press releases
ADVA achieves world-first 100G quantum-safe transport over 2,800km

Pioneering joint demo highlights how future-proof ultra-secure encryption is available today for existing telco networks

< Press releases
ADVA to play key role in OPENQKD project pioneering market-ready quantum-safe communications

Quantum communication infrastructure will be built with ADVA's Layer 1 and 2 encryption technology

< Press releases
ADVA brings post-quantum security to packet networks

FSP 150 ConnectGuard™ Ethernet protects VPNs from quantum computer attacks in pioneering research project

< Press releases
Colt harnesses ADVA FSP 3000 for quantum-secured transport in live network trial

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THANK YOU FOR YOUR ATTENTION!

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