AI and quantum

Why firms should prepare for both

The risks overlap. Some firms are already preparing for both.

2026 **AI concerns**	**How AI and quantum connect**	2033 horizon* **Quantum questions**
Data leaks →	AI moves sensitive data. A future quantum computer could decrypt some traffic captured today.	→ Could a breach today expose our data years later?
Identity & actions we cannot trust →	AI agents use digital identities and signatures. Quantum could break vulnerable public-key security behind them.	→ Could someone forge the systems our AI trusts?
Jobs & keeping up →	Quantum may help with selected AI tasks. Proving value still needs skills and fair comparisons.	→ Will we have the skills to tell value from hype?

HSBC: AI adoption and quantum preparation

AI adoption

Reports 600+ AI use cases in operation (August 2026).

Quantum security trial

2024 trial used post-quantum cryptography for tokenised gold.

ASD guidance: plan by end-2026. Replace vulnerable cryptography by end-2030.

*DARPA's 2033 horizon assesses useful quantum computing.
The date for breaking public-key security remains uncertain.

Nitesh Chawda, Sources HSBC, ASD, DARPA, NIST, Google Research