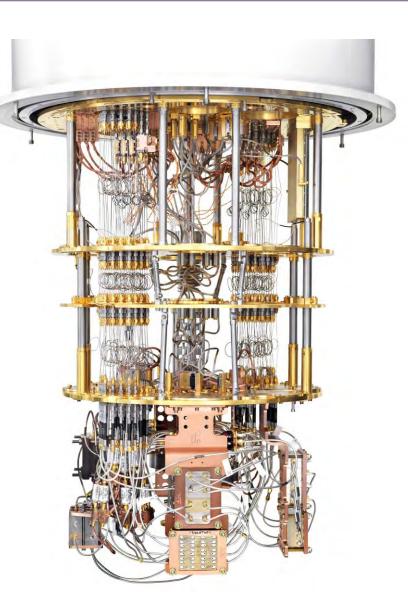


EMPOWERING SECTOR READINESS WITH QUANTUM SOLUTIONS

Eng. Abdullah Ibrahim Alsalman June 29th 2023

AGENDA

- Introduction to Quantum Computing Readiness
- The Need for Quantum Computing Readiness
- Benefits of Quantum Computing Readiness
- How to Achieve Quantum Readiness
- * Recommendations
- Conclusion



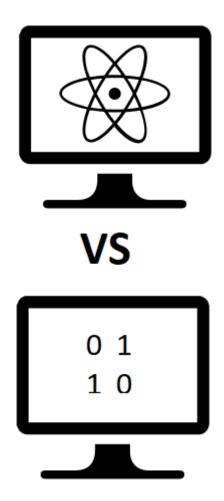
INTRODUCTION TO QUANTUM COMPUTING READINESS

Quantum computing is solving complex problems!

Sectors are staying competitive and prepared!

Sectors must take a step forward!

***** Sectors are staying safe!



THE NEED FOR QUANTUM COMPUTING READINESS

- 1- Quantum computing can disrupt industries and markets.
- 2- Proactive preparation is crucial to avoid falling behind.
- 3- Specialized experts and consultants provide guidance.
- 4- Understanding quantum technology is essential.



BENEFITS OF QUANTUM COMPUTING READINESS

1- Increased Competitiveness:

Enables informed decisions
Cost reduction
Innovative applications

2- Improved Security:

Robust Frameworks
 Risk Mitigation
 Governance and Compliance

3- Structured Data:

 Accelerates processing for faster results.
 Uncovers hidden insights within the data.
 Enhances efficiency in managing and analyzing large datasets.

TEN QUANTUM COMPUTING APPLICATIONS BETTER CYBERSECURITY DRUG WEATHER DEVELOPMEN FORECASTING ARTIFICIAL TRAFFIC INTELLIGENCE OPTIMISATION ELECTRONIC SOLAR MATERIAL CAPTURE DISCOVERY CLEANER FINANCIAL FERTILISATION MODELING eib.org

HOW TO ACHIEVE QUANTUM READINESS

1- Establish a Quantum Computing Office:

Create an in-house team to develop tailored strategies, ensure confidentiality, and improve collaboration within the sector.

2- Contract with Quantum Computing Companies:

Partner with major quantum computing companies to access proven technology, accelerate progress, and assess sector requirements.

3- Engage with Quantum Computing Organizations:

Connect with national and international organizations that guide sectors in preparing for quantum risks and opportunities.

RECOMMENDATIONS

1- Governmental Standardization:

Establish government standards for the quantum computing field to promote a cohesive ecosystem, mitigate risks, foster collaboration, and facilitate knowledge exchange. This will provide guidelines for quantum readiness and maximize gains.

2- Quantum Computing Standards Organization:

Create an international organization (QCS) that publishes standards, provides guidance, and offers certification to sectors. Align with Responsible Research and Innovation (RRI) principles to address challenges and prepare for potential consequences.



CONCLUSION

Quantum computing readiness is crucial for sectors to gain a competitive edge and seize new opportunities.

Benefits of quantum computing readiness include increased competitiveness, improved security, and structured data handling.

To achieve quantum readiness, sectors should establish a Quantum Computing Office, partner with quantum computing companies, or engage with quantum computing organizations.

Recommendations include governmental standardization and the establishment of the Quantum Computing Standards Organization (QCS).



Empowering Sector Readiness with Quantum Solutions

Eng. Abdullah Ibrahim Alsalman