



Moroccan Quantum Computing Cluster

Architecting the African and Euro-Mediterranean
Nexus for Quantum Innovation.

The Geo-Strategic Center of Gravity

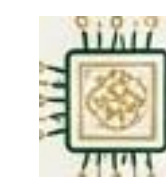
Positioning Morocco as the premier hub for quantum research, innovation, and training—bridging Africa and the Euro-Mediterranean.



Research: Developing advanced national capabilities.



Talent: Training high-level competencies.



Infrastructure: Creating simulation and experimentation platforms.



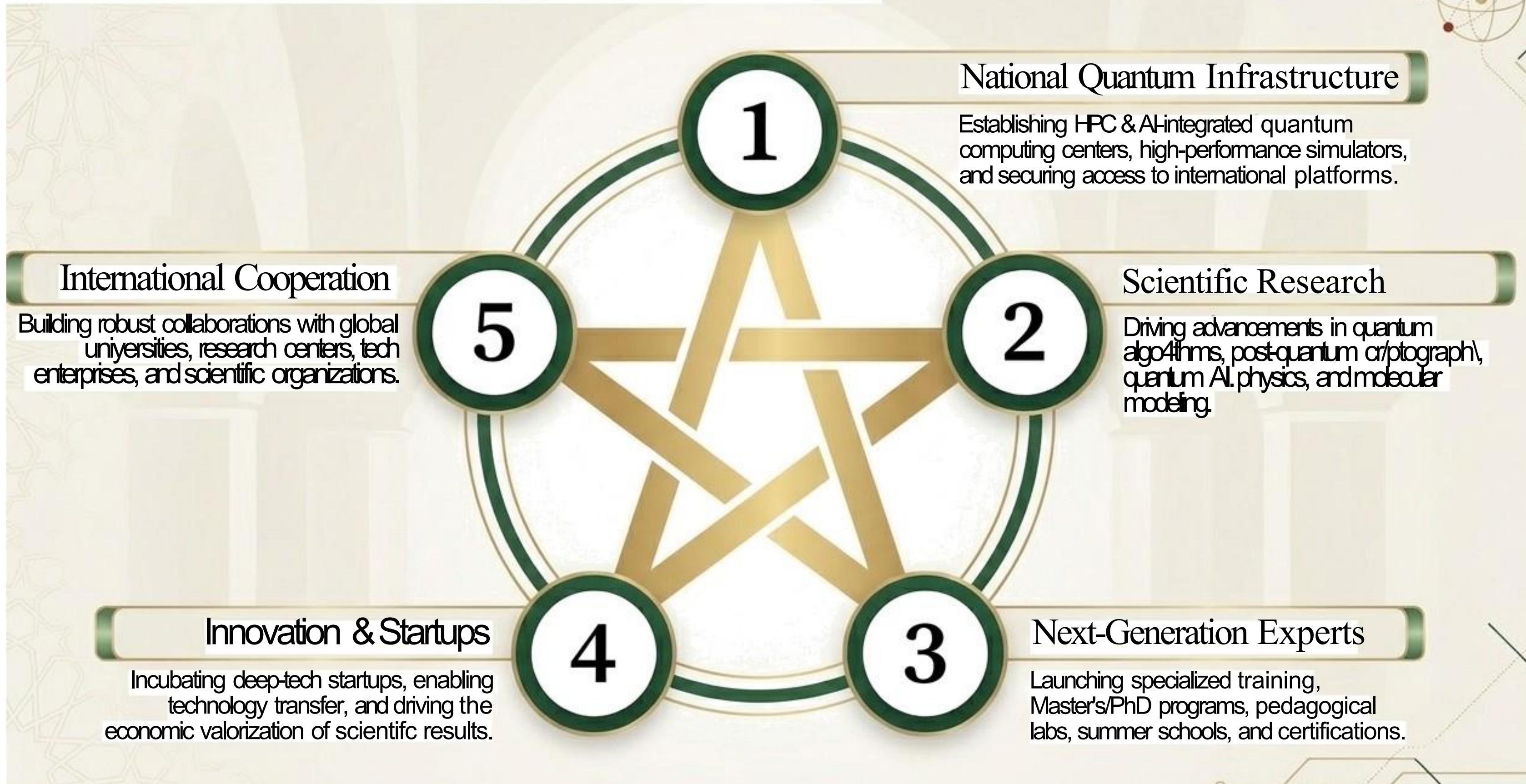
Partnerships: Forging strategic international alliances.



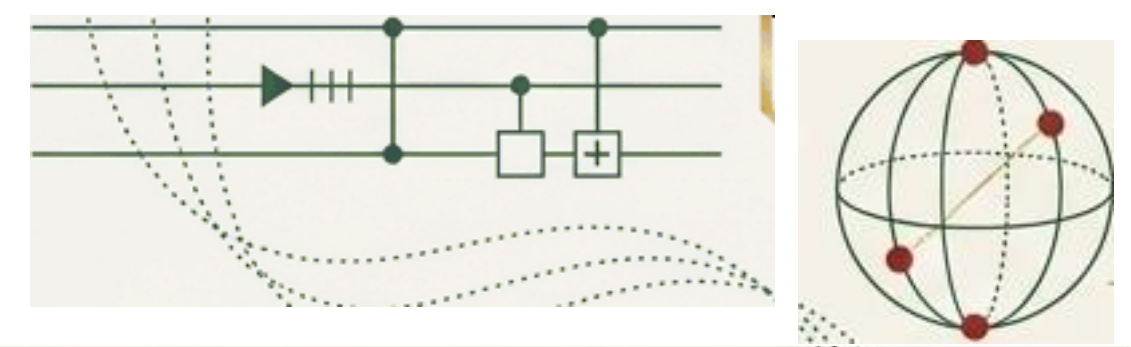
Impact: Driving high-impact industrial and societal applications.



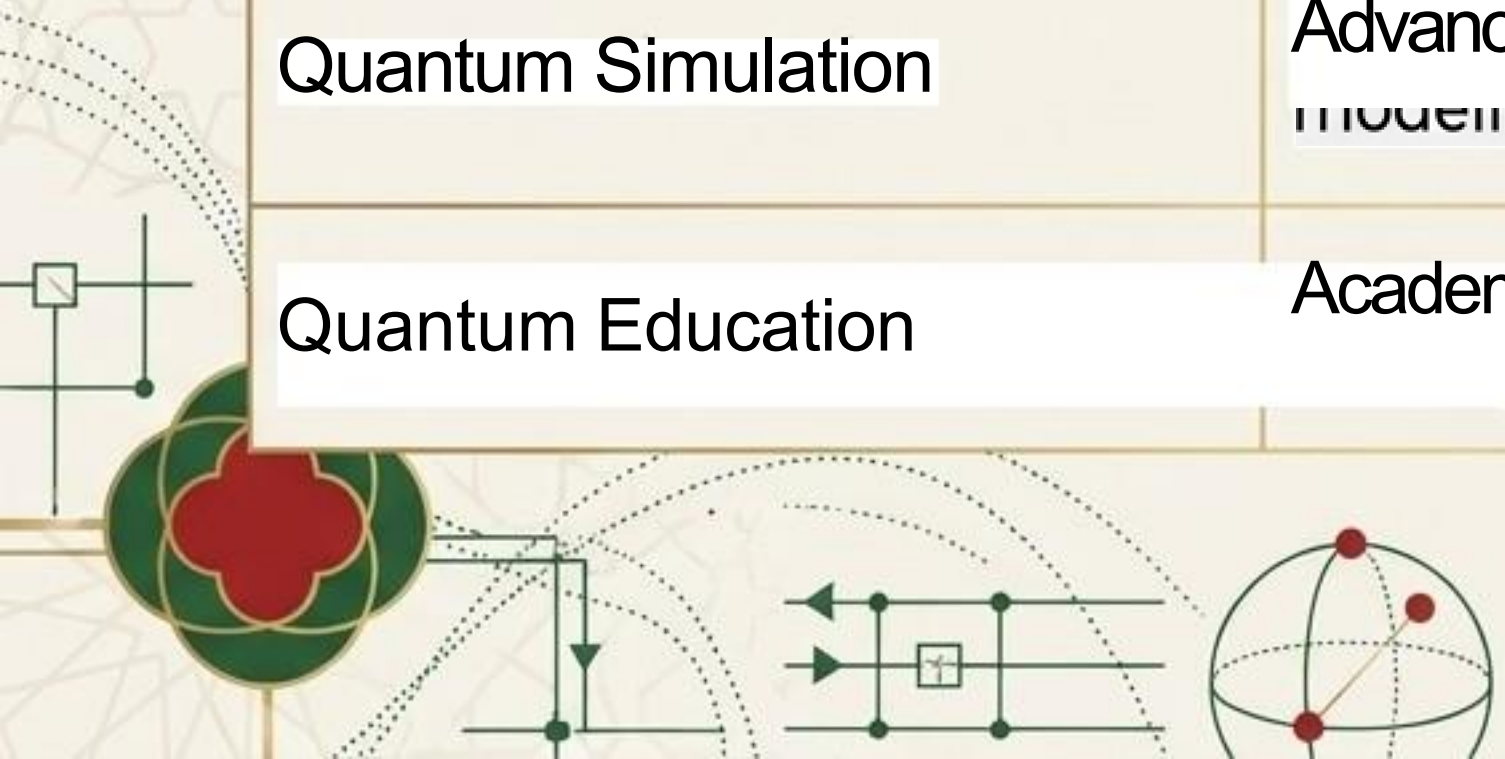
Five Pillars of the Quantum Ecosystem



Technological Capabilities Matrix



Technological Axis	Core Focus	Target Applications
Quantum Computing	Algorithms and architectures.	Complex problem solving, HPC integration.
Quantum Artificial Intelligence	Fusion of AI and quantum computing.	Accelerated machine learning and hyper-optimization.
Post-quantum Cybersecurity	Quantum-resistant cryptographic solutions.	Next-generation national data security.
Quantum Simulation	Advanced molecular and system modeling.	Breakthroughs in chemistry, medicine/pharmaceuticals, energy, and climate.
Quantum Education	Academic and professional	Developing a sovereign, high-tech talent pipeline.



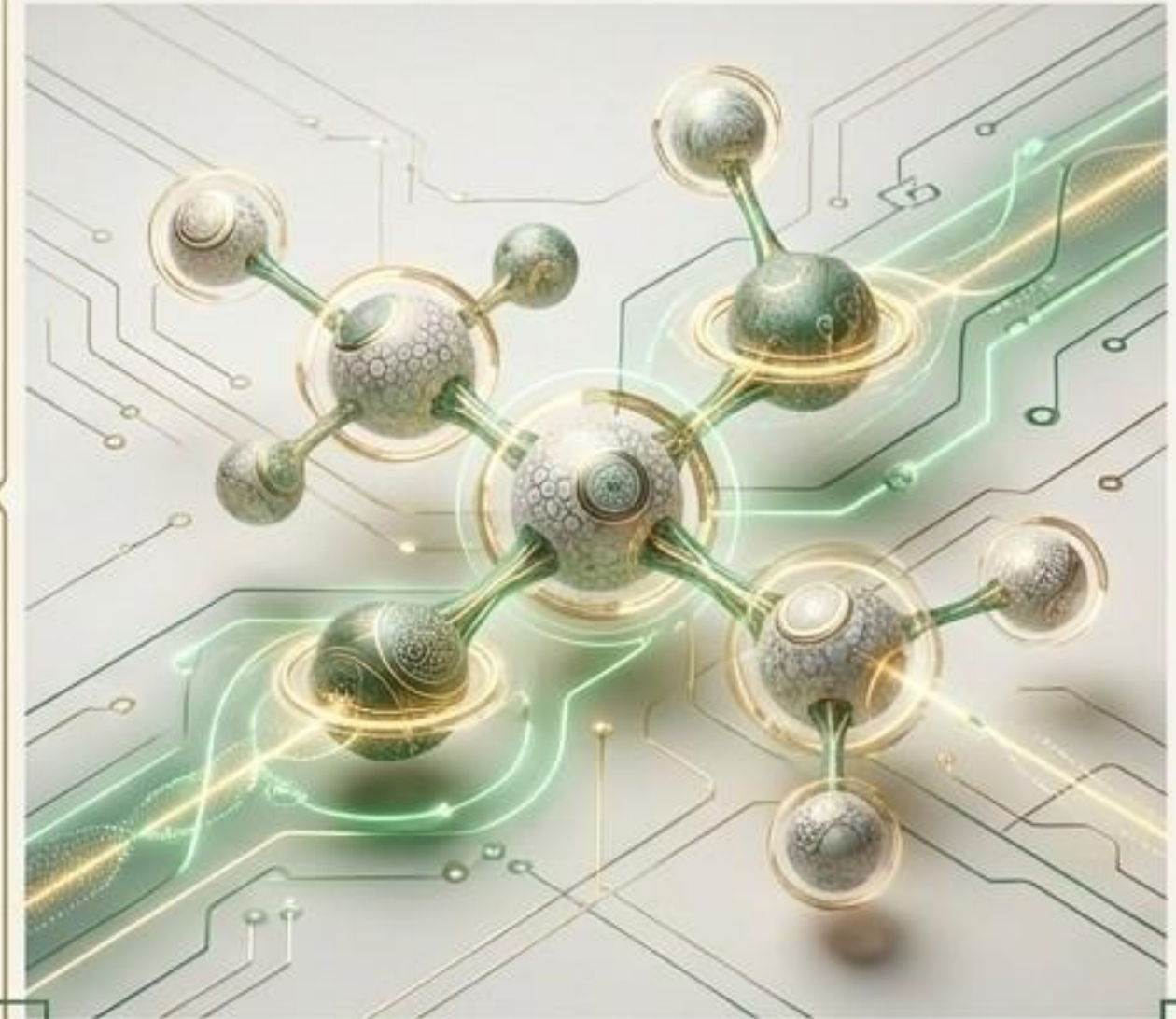
Applied Quantum Architectures

Post-Quantum Cybersecurity



Engineering quantum-resistant cryptographic frameworks to ensure impenetrable national and corporate data security.

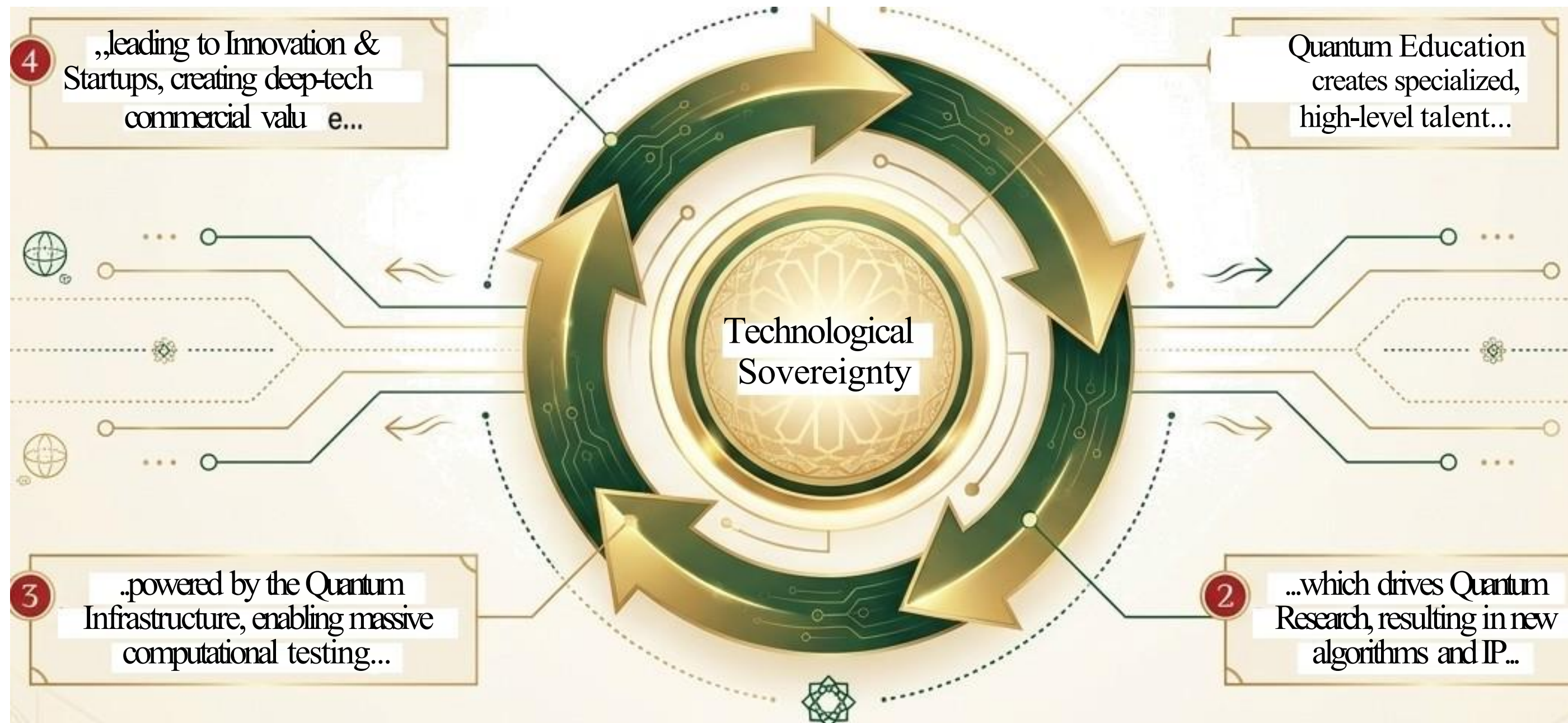
Quantum Simulation



Accelerating discovery in pharmaceuticals, energy, and climate sciences through ultra-advanced system modeling.

The MQCC Engine: A Self-Sustaining Ecosystem

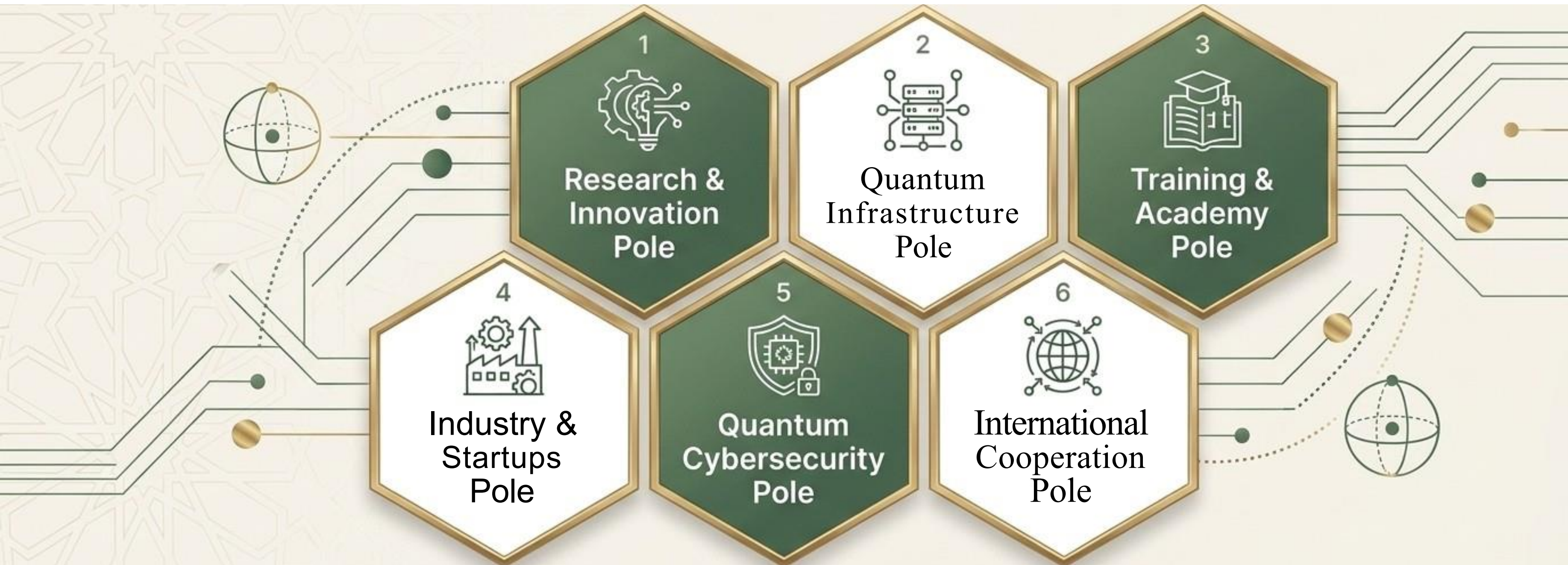
5 ...which attracts International Cooperation, bringing in global capital and tech giants, funding the next generation of education.



Expected Macro-Economic Impact

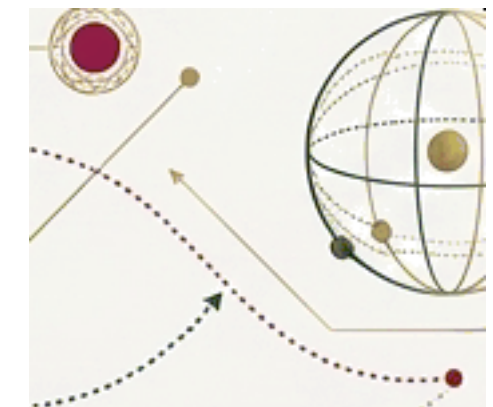


Operational Architecture



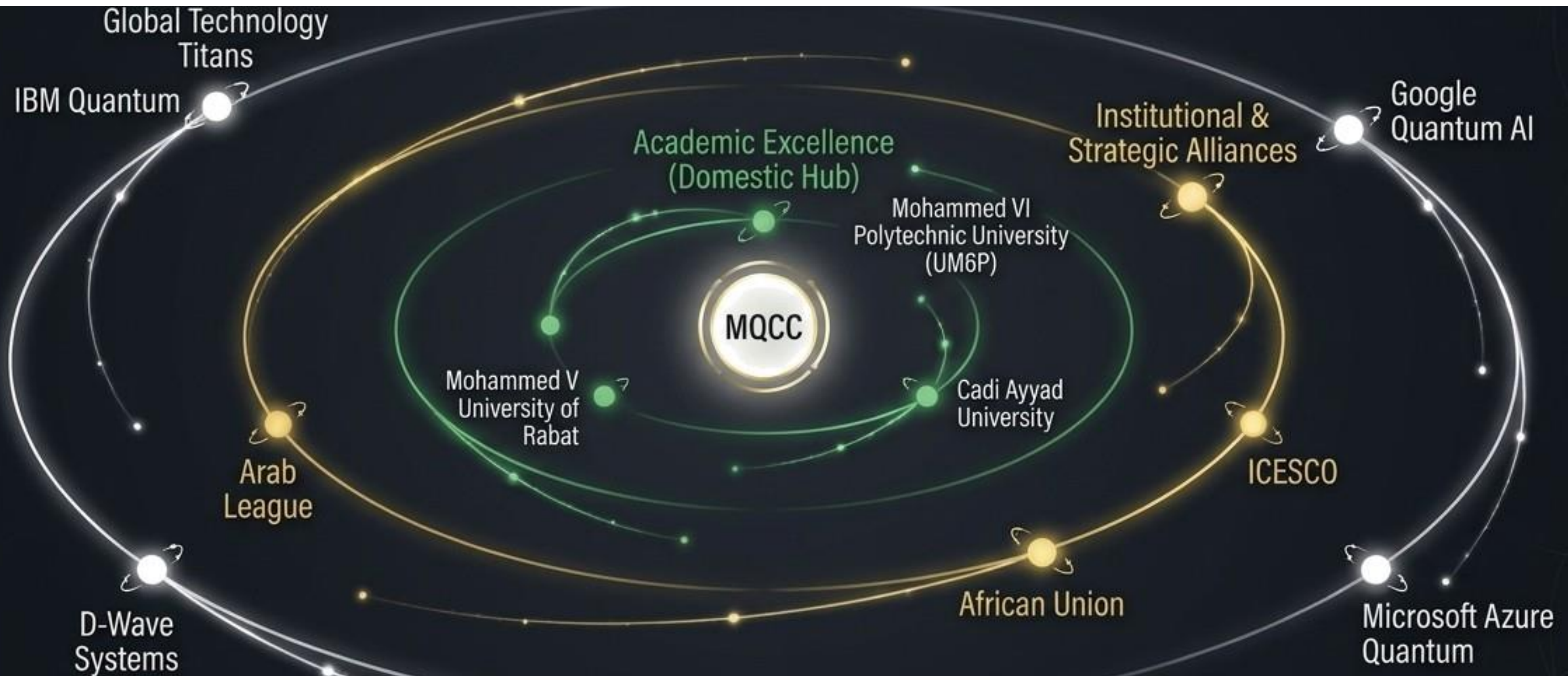
A federated structure ensuring multidisciplinary alignment across the ecosystem.

Expert Governance and Collaborative Leadership



A transparent, performant governance structure ensuring sustainable and strategic development at national and international scales.

A Global Constellation of Partners





Building a Competitive Global Ecosystem

The Moroccan Quantum Computing Cluster is a bold strategic initiative preparing Morocco for the technologies of tomorrow. By federating research, innovation, industry, and education, we are constructing a scientific and technological ecosystem that is competitive on the global stage. 99