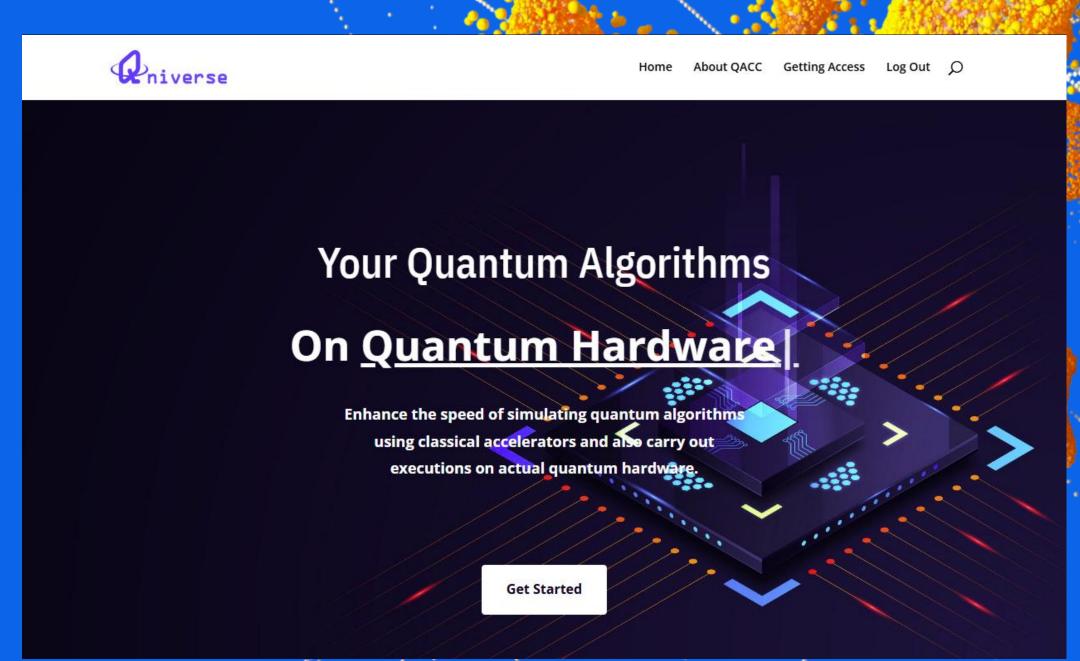
Qniverse

A Unified Quantum Computing Platform

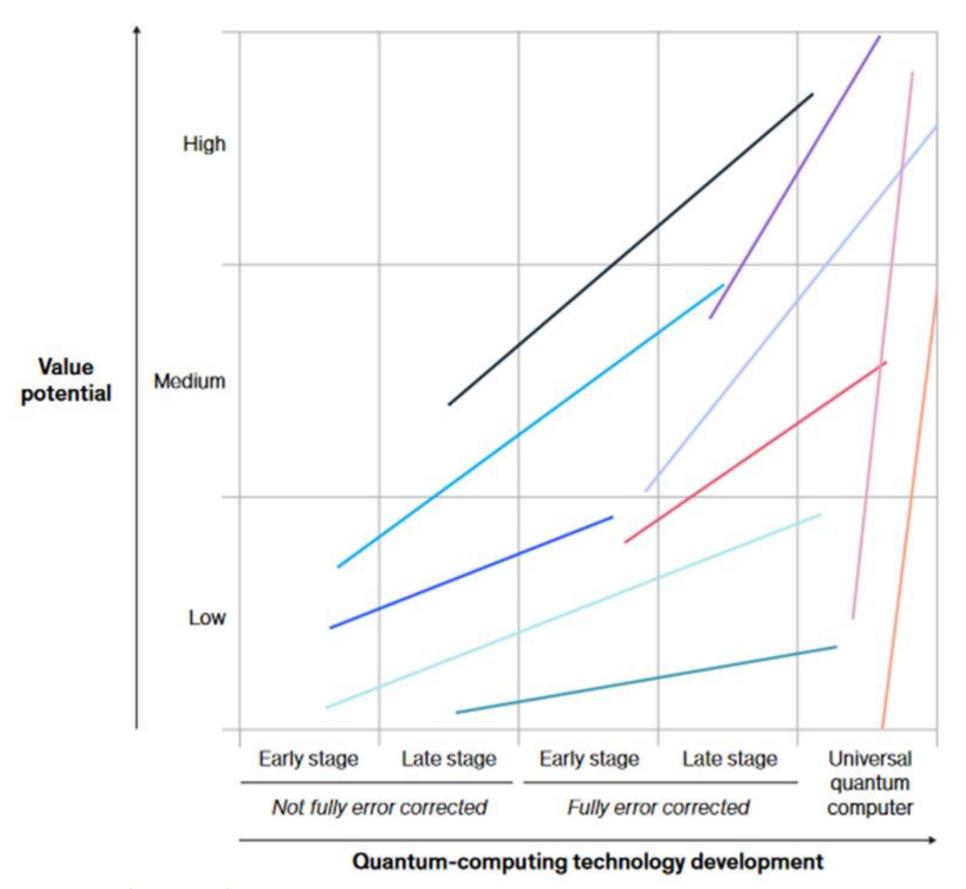
www.qniverse.in

S. Henry Sukumar Scientist 'F' HoD (QTG)



Potential of Quantum Computing





Battery-material research

Manufacturing optimization (eg, robot path planning and job scheduling)

Traffic optimization and route optimization for warehousing robots

Supply-network optimization and forecasting

Lightweight material design

Traffic optimization and fleet routing

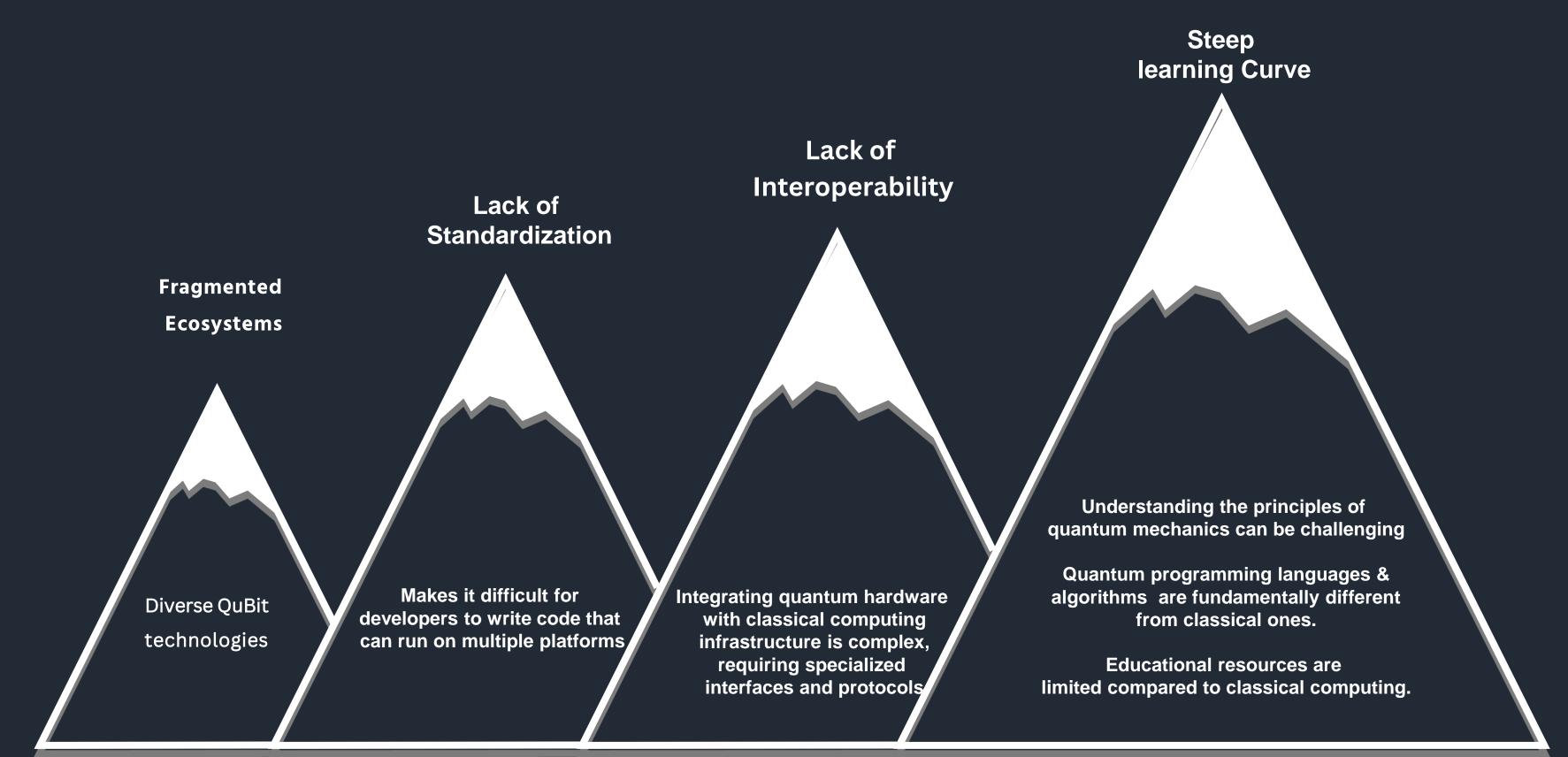
Autonomous driving R&D

FEA¹ simulations and generative design

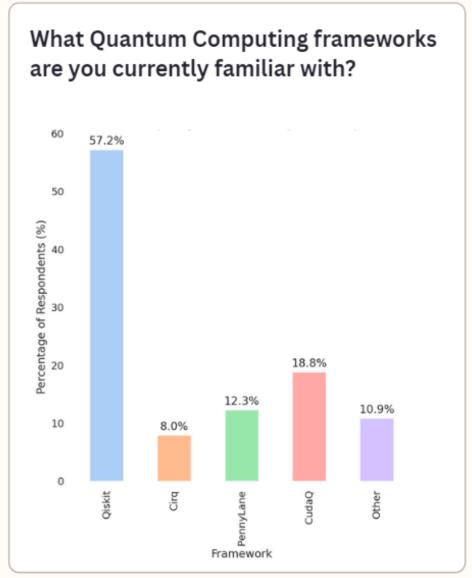
Production planning

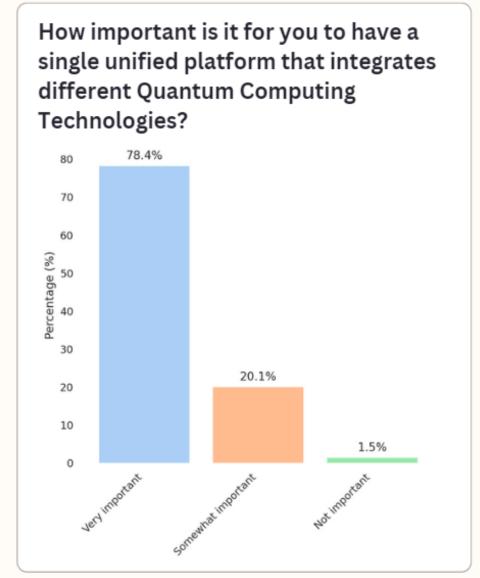
Quality and predictive maintenance Source: McKinsey:
Quantum Computing Use Cases are getting Real

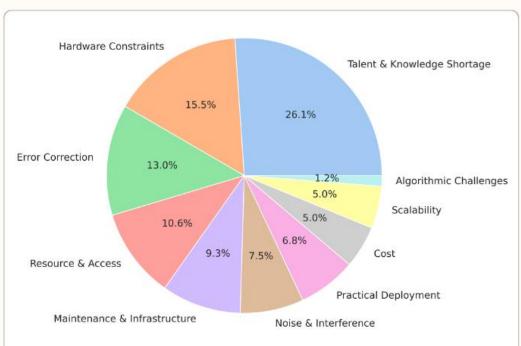
Challenges for Quantum Algorithm & Application developers & users

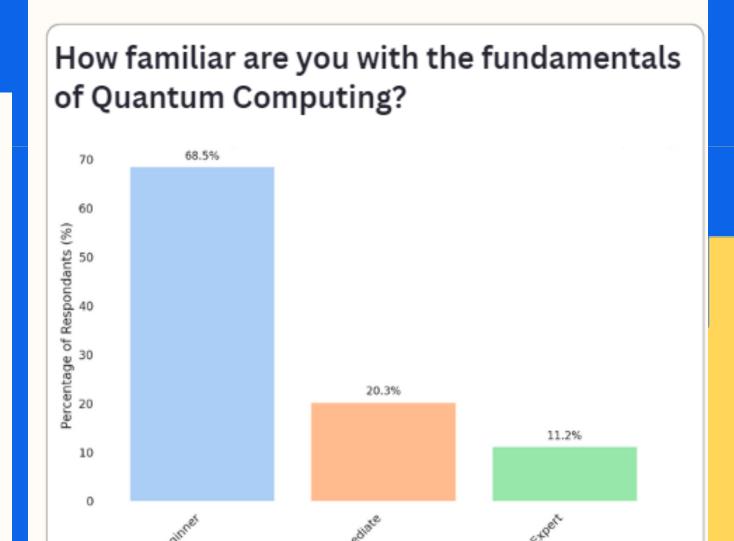


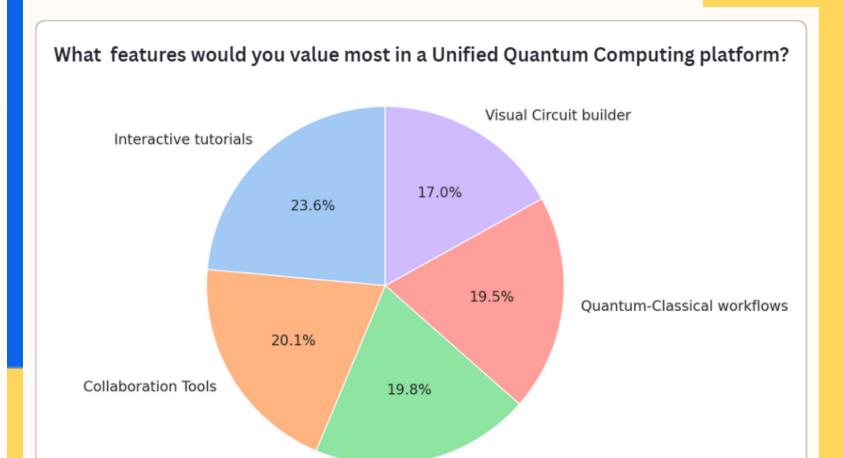
Survey Results



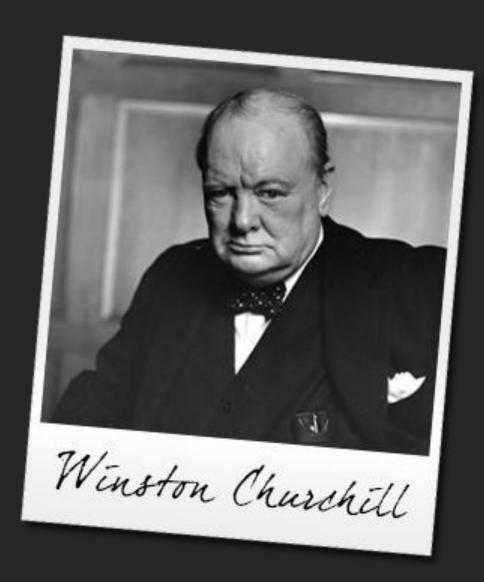






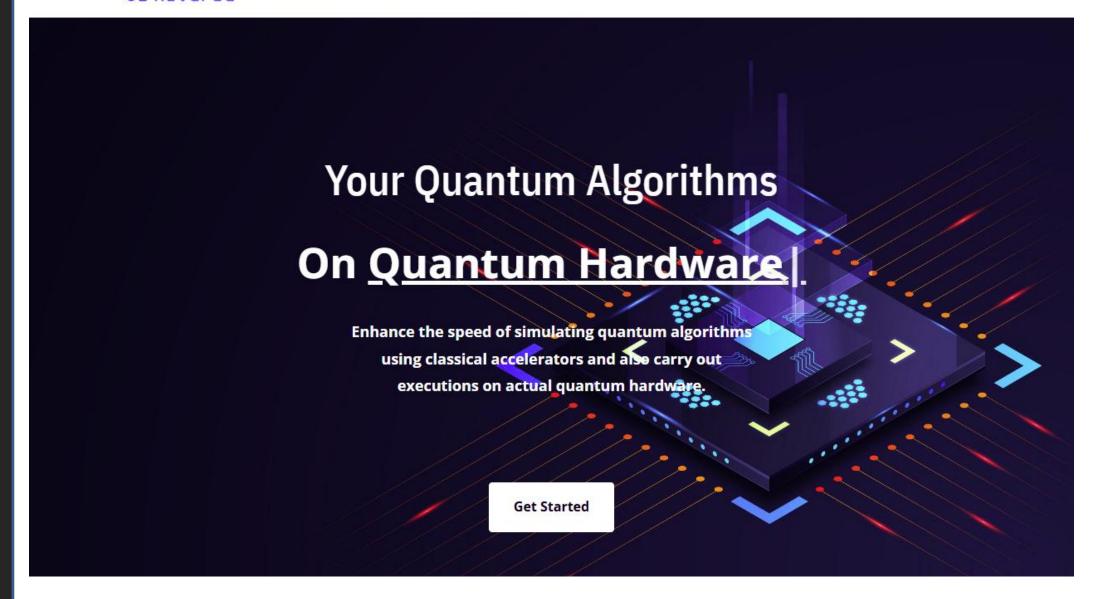


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"Out of intense Complexities, Intense Simplicities emerge" **Q**niverse

Home About QACC Getting Access Log Out 🔎

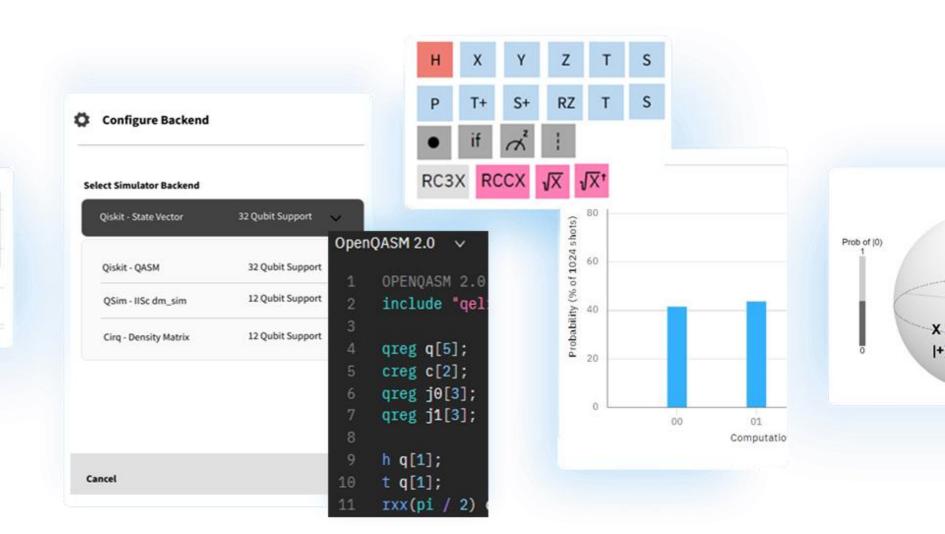




An Unified Platform, redefining the way developers, researchers, and enterprises engage with quantum technology.

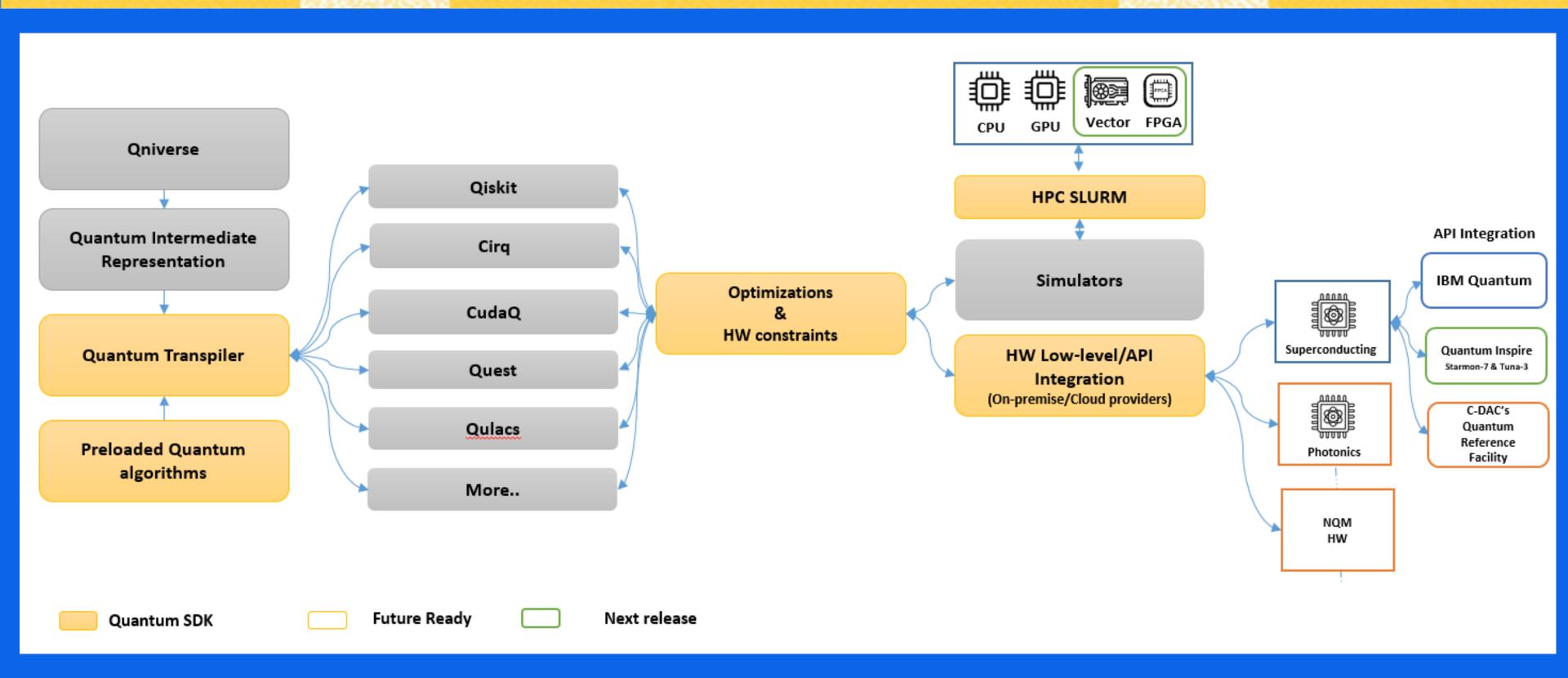
An integrated platform for designing, simulating, and executing quantum algorithms on classical accelerators such as GPUs, FPGAs & Vector processors and as well as execute on multiple quantum hardware platforms.

Software Development Kit (QSDK), which provides a comprehensive set of frameworks, libraries, and programming language features to interact seamlessly with both quantum circuit simulators and hardware platforms



Architecture





Complete Quantum Ecosystem

Enhance the speed of simulating quantum algorithms using classical accelerators and also carry out executions on actual quantum hardware.





Unified Interface

A single, intuitive environment for all stages of quantum algorithm development.



Platform Agnostic

Seamless execution across various quantum hardware platforms and classical accelerators (GPUs, FPGAs, Vector processors).



Quantum SDK

In-built libraries enable users to work with pre-built components and easily integrate them into their workflows, enhancing development efficiency.



Optimized Algorithm Libraries

Pre-built, optimized quantum algorithms for faster development.



Hybrid-Classical Quantum Workflows

Seamless integration with leading quantum providers and PARAM HPC Supercomputers for enabling hybrid classical quantum workflows.



Comprehensive-learning ecosystem

Combines theoretical quantum mechanics with hands-on programming tutorials, enabling beginners and experts to upskill efficiently.

Why Qniverse Matters?







"Qniverse is designed to balance performance and accessibility, enabling users from diverse backgrounds to engage with quantum computing effortlessly."

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