

QMware

QUANTUM AS A SERVICE: ANALYZING THE FIRST GLOBAL QUANTUM CLOUD



DEEP TECH DUE DILIGENCE AT QMware - A JOINT VENTURE BETWEEN TERRA QUANTUM AND NOVARIION

European Venture Capital firm Lakestar requested Philipps & Byrne to conduct a technology due diligence on a startup that aspires to offer quantum computing as a service by building a hybrid quantum computing cloud. As we are well rounded in Deep Tech, we were the natural choice for Lakestar to assess QMware AG - the quantum high-performance computing company offering Quantum as a Service. QMware AG was founded by Terra Quantum and Novarion, merging classical and quantum computing capabilities to establish a new benchmark in cloud computing.

Location St. Gallen	Type Funding Round
Engagement Deep Tech Due Diligence	Technology Quantum Computing

TERRA QUANTUM AND NOVARIION: BUILDING A HYBRID QUANTUM COMPUTING CLOUD

QMware AG aspires to offer Quantum Computing as a Service to help organizations solve business challenges by leveraging quantum technology. The company offers hybrid quantum computing, promotes an 'Open Quantum Stack', capable of virtualizing any type of quantum processor, and simultaneously integrates high-performance and quantum computing today.

The product portfolio includes their proprietary hybrid quantum hardware, the private QMware cloud services as well as their own software development kit. QMware AG positions itself as a partner for businesses who want to step into the future of quantum informatics and leverage quantum technology for their organization and products.

TECH DUE DILIGENCE: AUDITING QMware's APPROACH TO QUANTUM AS A SERVICE

Pursuing Deep Tech ventures, such as Quantum Computing, offer a high level of potential. At the same time, they can be much more risky than established technologies with plenty of use cases and growth best practices. That is why our longstanding client Lakestar got us on board for the Tech DD.

As a trusted tech advisory partner, with profound Know-how in Deep Tech, we assessed QMware AG and provided Lakestar with the necessary insight for their investment decision.

At its core, our assignment was to assess the technical feasibility of the Quantum Computing as a Service approach. The due diligence also included benchmarking and a defensibility check against other existing solutions in a highly dynamic and continuously changing market.

Not only did we assess the quantum computing simulation concept, but also the high-performance computing (HPC) environment. And finally, we provided our estimation of the feasibility of future hybrid approaches between quantum simulation and real quantum computing.

Today QMware is actively operating in the market and working with organizations in different industries.



"Hybrid quantum computing presents our customers with the opportunity to start working on use cases already today. Leveraging the hybrid quantum cloud QMware, we can generate business benefits in all key industries, ranging from automotive, energy, financial services, and logistics to pharma, to name a few."

**Markus Pflitsch, CEO and Founder,
Terra Quantum**



"With QMware we have established the first quantum high-performance computing company. With our Quantum-as-a-Service offering we lower the entry barrier for businesses and industry to build their first applications and apply them in a real-world scenario. The thorough work of P&B lays the foundation of trust for our investors to support our venture in becoming the European alternative for global cloud computing."

Georg Gesek, CTO, QMware

About QMware AG

QMware is the market leader for Hybrid Quantum Computing (HQC) headquartered in Switzerland, bridging the gap between classical high-performance and quantum computing. QMware leverages an innovative hybrid approach offering customers quantum advantage already today: high-performance classical computers merged with quantum processors. These are based on both physical and emulated qubits virtualized together in a so-called intermediate representation for the efficient processing of hybrid quantum algorithms. The virtualization of Quantum Processing Units (QPUs) is a new benchmark in quantum computing. QMware proposes its novel hybrid quantum computing technology as an alternative for best-in-class cloud computing – with the USP to be General Data Protection Regulation (GDPR) compliant. QMware also supports GAIA-X standardized services and defines an unprecedented level in quantum-based security models and data protection across the global IT industry. Visit QMware AG on [LinkedIn](#) and at qm-ware.com

About Lakestar

Lakestar's mission is to find, fund and grow disruptive businesses - enabled by technology - that are founded by exceptional entrepreneurs in Europe and beyond. Founded by Klaus Hommels, the team's early investments include Skype, Spotify, Facebook and Airbnb. Since raising its first fund in 2012, Lakestar manages an aggregated volume of over €1.6bn across three early stage funds and a growth fund. The team actively advises and supports portfolio companies in marketing, recruitment, technology, product development and regulatory insight, accompanying founders from seed to early stage to growth stage or exit. Lakestar currently has the privilege of holding investments in Revolut, Blockchain.com, Opendoor, Oscar, GetYourGuide, sender, Eigen, Public.com, SoFi, Solarisbank, Uncapped, Yapily, Terra Quantum, accuRx, Rhino, ZEBEDEE and Hometogo to name a few. Lakestar has presence in Berlin, Zurich and London. Lakestar has presence in Berlin, Zurich and London. Visit Lakestar on [LinkedIn](#) and at lakestar.com.

About Philipps & Byrne

With 15B+ EUR of guided funding, and 600+ tech assessments in 25+ countries, from Seed Funding to mid-nine-digit M&A transactions, we help the European and global tech ecosystem build the world of tomorrow. We stand for honest, reliable, and applicable tech advisory with zero bullshit. We offer Tech DD, PMI and portfolio support to investors and Tech & Product health checks, growth sparring, and Tech M&A support to founders and Tech executives.

Visit philipps-byrne.com

© Copyright 2022 Philipps & Byrne. All rights reserved.