



Market Intelligence White Paper

The Quantum Insider

Last updated: 27 April 2024



TLDR? Watch the overview here:

■ The Quantum Intelligence Platform: track the quantum market in one place





Introduction

Quantum technology is a rapidly emerging and constantly evolving industry that is increasing in size and complexity daily. Not only are quantum technology companies a part of this rich ecosystem, but the value chain stretches to end users across other industries and sectors who are investigating the transformative power of quantum for competitive advantages in everything from enhancing the efficiency and reducing the cost of drug design to fortifying communication networks.

In this industry, the swift proliferation of startups, frequent investment rounds, rapid dissemination of research breakthroughs, constant stream of company news and information, make it difficult to stay informed and up-to-date.

The Quantum Insider's intelligence platform equips decision-makers with insights to easily monitor and navigate everything that is happening in this complex industry.

The intelligence platform gathers and structures global data on quantum technologies, presenting it in a user-friendly format. Through this platform, investors, startups, corporations, accelerators, policy makers, and governments gain a holistic overview of the entire quantum technology landscape.

It features detailed data on companies, investors, academic groups, government institutions, and more. The data is underpinned by a proprietary taxonomy that allows the information to be filtered and structured. Customizable metadata, along with powerful visualization tools such as our unique graph explorer and market mapping, make it easy to extract intelligence out of information.

Throughout this document we have provided examples and screenshots. All of these are taken directly as screenshots from the platform.

With The Quantum Insider's intelligence platform, decision-makers can stay informed, make strategic decisions, and navigate the rapidly evolving quantum technology landscape. The Quantum Insider is part of Resonance.

This whitepaper is designed to show you and your institution how to use the intelligence platform to accelerate your quantum adoption journey.





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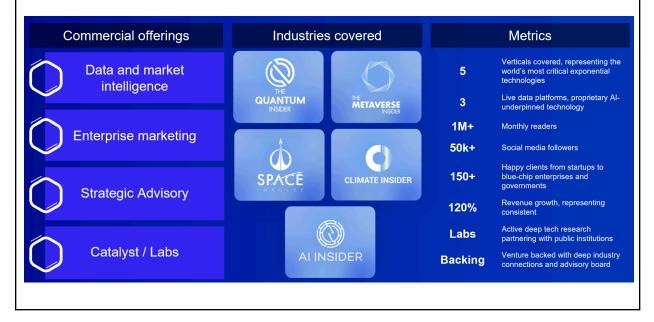
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About Resonance

- The Quantum Insider is part of Resonance.
- Resonance provides data-underpinned market intelligence to enterprises, investors and governments.
- We are a venture-backed 40-person team of analysts, developers, consultants and ex-investors, HQ'd in Toronto, Canada.
- We specialize in complex, emergent markets such as quantum, space, immersive, Al, and climate-related technologies.
- Our market intelligence is underpinned by a combination of expert analysis and Al-underpinned data collection and structuring at scale and sold as a subscription
- We use our data to inform our strategic advisory work but enrich this with primary research, looping in our sector experts where required.
- We own proprietary media brands in the verticals we operate in, giving us an unfair advantage versus competitors providing marketing services
- We have a strong track record of case studies and a blue-chip client base.



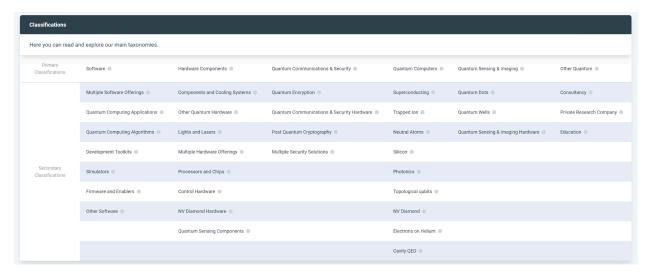




Coverage

This section outlines the coverage levels offered.

Technology



Quantum technology encompasses a range of extensive and multifaceted subdomains. Our platform provides a comprehensive analysis of each of these domains, offering a holistic understanding of the field. Each of these high-level categories are underpinned by a deeper taxonomy. For example, users can filter by superconducting quantum computing companies in Europe.

- Quantum Computing: The quantum computing industry is expanding rapidly, with 50+ startups, 300+ large corporations, 30+ government organizations, and 540+ universities actively developing products and solutions. This growth is supported by more than 5B USD funding from investors and governments. The industry is vast and complex, and our platform offers a comprehensive overview of the key players and their activities. Our data includes information on qubit modalities, roadmaps and emerging commercialization.
- Quantum Hardware: Quantum hardware companies represent a critical part of the supply chain for quantum technologies companies. They are the ones that make the important parts needed to build various quantum devices. However, these companies are not as well-known, which makes it hard to find reliable information about them. Our platform has over 430 companies in our database, and we keep track of all their technological details and partnerships in the rapidly growing ecosystem.
- Quantum Software: End users need appropriate quantum algorithms and easy to use softwares to make the maximum out of quantum computers. There are over 260





companies which build quantum software and algorithm solutions. Finding information about them is a difficult task as they operate in a niche market, but using our platform you can understand in depth about these organizations.

- Quantum Sensing: Quantum sensing harnesses the principles of quantum mechanics
 to attain remarkable accuracy, sensitivity, and resolution in measurements. While its
 practical applications are already evident in various domains, the organizations in this
 field often remain under the radar. Our platform sheds light on these 100+ quantum
 sensing companies, investors, universities, and other entities, presenting a
 comprehensive overview of the ecosystem.
- Quantum Communication: Future critical communication channels will be secured
 using quantum properties creating a material market for quantum communications. We
 track 50+ companies and numerous other entities working in this sector and investors
 actively looking at this opportunity.
- Quantum Security and Post Quantum Cryptography (PQC): As cyberattacks become
 more prevalent, and decryption approaches advance, enterprises are seeking enhanced
 cybersecurity measures. We track quantum devices such as Quantum Random Number
 Generators (QRNGs) and track companies working on Quantum Key Distribution (QKD).
 We track hundreds of stakeholders in the fast growing sector.

Geography

Our platform provides a comprehensive global perspective of the quantum landscape. We provide coverage across geographies. All data is structured down to the City level.







Entities

- 1. 1,280+ quantum technology companies (computing, security, sensing, etc.)
- 2. 1250+ investors involved in quantum technology fundraises
- 3. 780+ funding rounds since 2002
- 4. 850+ groups/centers involved in quantum technology research
- 5. 540+ universities engaged in quantum technologies
- 6. 60+ national labs and government agencies
- 7. 400+ end users of quantum technology
- 8. 35+ Consortias within the Americas, EMEA, and APAC
- 9. 60+ Quantum Computing as a Service and Quantum Processing Unit Providers





How it works

This section provides guidance on how the intelligence platform practically works.

Data collection

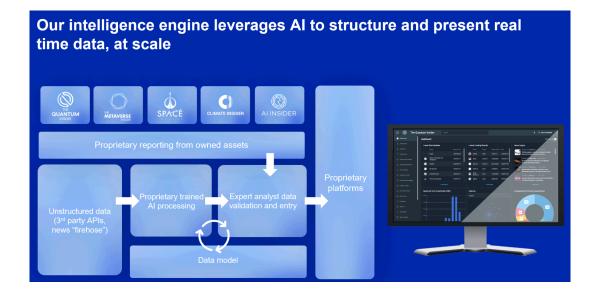
- The core of the intelligence platform is highly-structured open source intelligence (OSINT in military parlance).
- Resonance owns relevant media brands which means it has access to the flow of information in the markets that it operates in.
- This is supplemented with information from non-Resonance sources, connecting to ~100k media sources media is unstructured, unprocessed data.
- Additional 3rd API's are leveraged to enrich data inputs (e.g. media coverage data, patent data, academic paper data).

Data structuring

- Resonance has developed its own core software to turn large inputs of unstructured data into useful industry intelligence.
- The software is underpinned by Resonance's proprietary industry taxonomies which define how a market should be structured, understood and analyzed.
- Resonance leverages its proprietary AI to cut through thousands of data points. This processed data is structured and internal expert analysts.

Data output

- Structured data is presented in a modern, highly customizable multi-tenant SaaS platform
- Access is provided as a subscription and is delivered through your browser.







Use cases

This section provides an overview of the types of use cases covered offered by the platform.

Competitive Intelligence

Access relevant comparative metrics across quantum companies to ensure your organization stays competitive.

Due Diligence

Analyze rapidly emerging technologies with the latest and deepest information, supporting investment decisions and product development.

Ecosystem Mapping

Gain a structured view of the quantum technology ecosystem, including academic institutions, national labs, and corporate end users.

Opportunity Scouting

Cover the entire supply chain, from suppliers to end users of quantum technology, and identify potential partnerships and collaborations.





Worked examples

This section provides some practical worked examples of how user types are using our platform.

Government Institution

1. Develop your National Quantum Strategy



Our platform assists in developing national quantum strategies by providing in-depth insights into other nations' quantum strategies (available in the reports section) and comprehensive funding details on a geographic basis, including private and public funding.

2. Identify partners for skilling and solutions







Our platform provides in-depth information regarding a nation's universities actively engaged in quantum research. This empowers users to identify suitable partners for skill development and research collaborations. Additionally, use cases featured on the platform facilitate the identification of practical applications that can leverage quantum technologies.

3. Obtain information about your country's quantum ecosystem



Get comprehensive understanding of any countries quantum ecosystem through our map view (India shown as an example)

Using our map view feature our users can get a complete understanding of a country's quantum ecosystem including startups, universities, government entities, investors and much more.





Investors

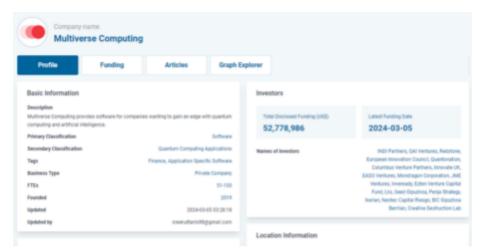
1. Discover potential investment opportunities



Snapshot of Quantum Startups Across Various Fields from Our Platform

The intelligence platform provides comprehensive and up-to-date company information spanning various quantum domains across the globe. This empowers users to discover disruptive quantum ventures in their early stages, offering valuable investment opportunities.

2. Perform due diligence on companies of interest



Company Profile gives in depth insights into each company (Multiverse Computing shown as an example)

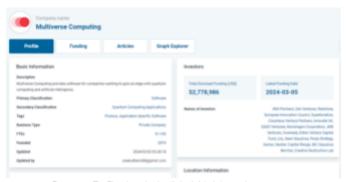




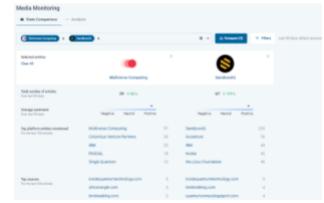
We offer in-depth information about each company. This includes essential details such as basic company information, technological specifications, funding data, patents filed, and relevant articles.

Quantum company

1. Gather competitive intelligence



Company Profile gives in depth insights into each company (Multiverse Computing shown as an example)



Comparison of media coverage between Multiverse Computing and SandboxAQ using our Media Monitoring Tool.



List of patents along with relevant information



In depth Analysis of patent publication from our platform

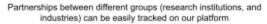
We offer in-depth information about each company. This includes essential details such as basic company information, technological specifications, funding data, patents filed, and relevant articles. Our unique media monitoring tools help our users to gain media mentions about all relevant entities, proving to be a great tool to track their PR and marketing performance.





2. Identify potential partners or investors





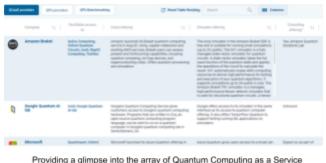


Showing the various types of investors involved in the quantum field, indicating the wide interest and support in the industry

Our platform offers comprehensive investor information, covering basic details, portfolio, and funding rounds. Additionally, the partnerships page assists users in discovering potential partners for collaborations, enhancing networking opportunities.

Enterprise

1. Find partners to implement quantum solutions



Providing a glimpse into the array of Quantum Computing as a Service (QCaaS) providers and the Quantum Processing Units (QPUs) they offer, as featured on our platform.



Snapshot of Quantum Companies Across Various Fields

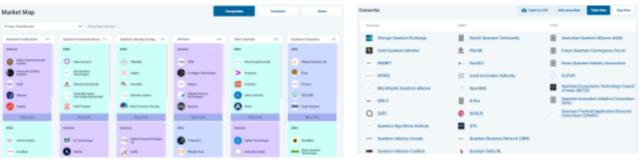
With our platform, users gain valuable insights into all available quantum processors, the various services offered by different companies, and a range of practical use cases. This





comprehensive information empowers them to make informed decisions and select suitable partners for implementing their quantum solutions effectively.

2. Identify relevant stakeholders and consortia to collaborate with

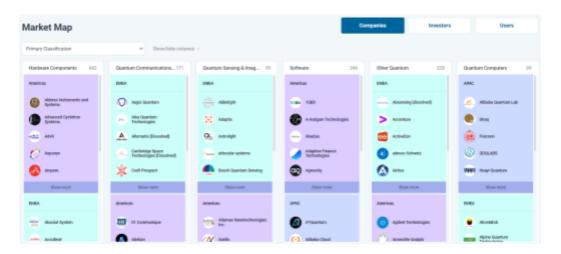


Snapshot of Market Map Tool: This tool shows all the companies, investors, and users around the world, sorted into different groups.

Snapshot of consortiums from different countries and regions around the world.

With our platform, users can easily identify relevant stakeholders, ranging from universities to startups, for collaborative efforts in research, skill development, and more. Our extensive consortia page showcases various quantum consortia worldwide, providing a convenient resource for enterprise users seeking to join these consortiums.

3. Find companies for strategic investments



Snapshot of Quantum Startups Across Various Fields from Our Platform





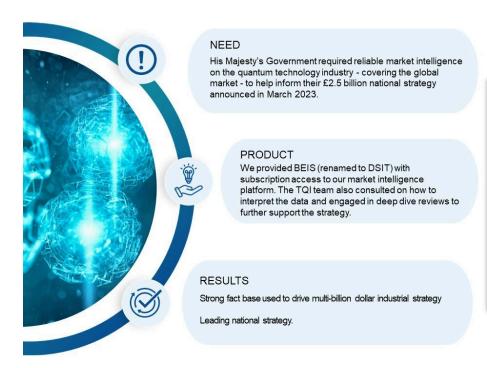
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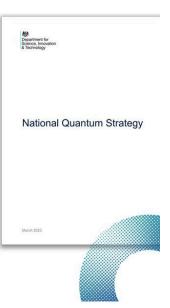


Case studies

Example case studies from our customers



CASE STUDY





CASE STUDY







Testimonials

Feedback from our delighted customers



Stuart Woods

Managing Director of Oxford Instruments

Understanding the quantum market can be akin to understanding quantum physics itself. I have found that the TQI breaks down the market and allows me to look at the data how I want - simply and cleanly - separating out funding from investment to services and applications. This product again shows The Quantum Daily's industry leadership.



Thomas Park

Partner Lead for BDC's Deep Tech Venture Fund

TQI has become a key source of information and insights for our fund. There are few available resources if you're looking into quantum or deep tech in general, and we're very impressed by what TQI has put together.



Jimmac Lofton

Business Development at Quantinuum

The Quantum Insider has emerged as a critical resource for our team as commercial markets develop for quantum technologies. Their continued contributions to the quantum ecosystem is significant.





Get started

You can start exploring a limited version of the TQI Intelligence Platform now by visiting the platform <u>here</u>.

Premium access is offered as a SaaS monthly subscription and is priced based on number of seats and access rights.

For those who are looking for more than self-service access we support our clients with bespoke, market intelligence-driven consulting.

To learn more please contact us at hello@resonance.holdings