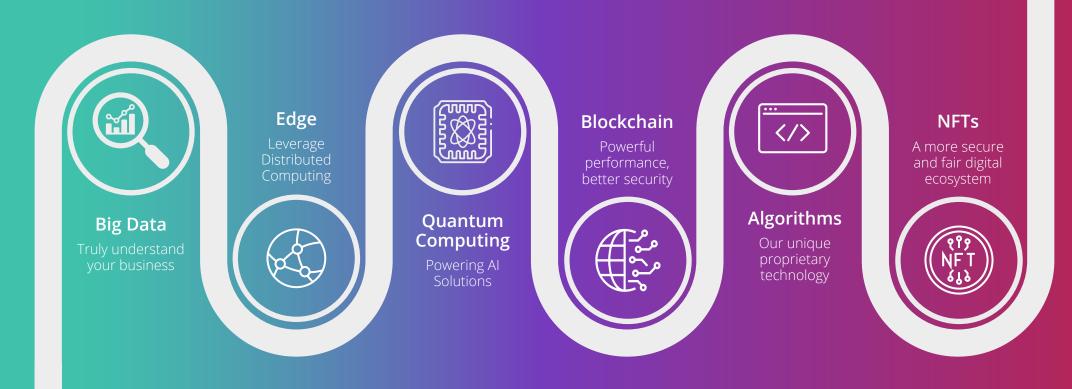
Make Possible, The Impossible in Biopharma

Unlocking Al's true potential in pharmaceuticals for the greater good.



Our Technologies



Why **Quantum**?

Data is the last frontier when it comes to competitive advantage. Being able to identify, collate, mine, and interpret your business data – and act on it – provides new avenues for innovation, automation, and growth, irrespective of the market you operate in.

With a full intelligent solution suite, powered by the latest developments in Al and machine learning, Quantum Al can help your organisation unlock business intelligence with Al, spot trends and patterns in big data with deep learning, and remain secure.

Trusted in the industry, we have created a secure Al platform on the basis of next-generation methods, including future concepts of Quantum Computing, for the modern organisation. We provide business insights, pattern & trend learning, and self-learning. Quantum helps organisations across sectors achieve leaps forward by providing tailor-made Al-driven solutions that apply Deep Learning, Machine Learning and Artificial Intelligence to rapidly resolve business challenges and unlock intelligence. And we're committed to doing this in an ethical manner.

Our mission is to help businesses apply the best aspects of Al to their business through innovative technology, services and solutions that automate mundane, repetitive tasks, create a competitive edge or improve security. And our objective is always to do so in a manner that augments and informs the activity of your human workforce. Al to assist - not to replace.



Our Solutions: Tomorrow's Technology Today

Intelligence that drives innovation, security and growth

Quantum AI deliver a powerful suite of ground-breaking technologies that help organisations across sectors overcome critical business challenges through the very best in Deep Learning and Machine Learning applications. These applications are underpinned and accelerated by harnessing the power of quantum and edge technologies, and combined with our unique algorithms, deliver faster, deeper and more accurate intelligence for your business.

Quantum Computing

We build intelligent software for organisations of varying operations; creating the opportunity for individuals to do great things with a dynamic Al engine growing with you and your organisation to make better-informed decisions.

The Quantum platform is a real-time, Al-centric product that works intelligently with self-governance. Once calibrated for your requirements, it's then able to self-learn, self-heal, and adapt to deliver insights and performance or security improvements you didn't know were possible.

Machine Learning

Machine Learning can be a powerful tool across multiple parts of your organisation, with a breadth of capabilities that simply make work more efficient. At Quantum, we see Machine Learning as a powerful ally of your human workforce – Not a threat to them: By leveraging the power of Machine learning tools in the right way, you can free your teams from mundane, low value tasks, and enable them to concentrate on higher-value projects, while getting more of those mundane tasks done faster.

But the Power of Al goes far beyond this: its ability to constantly learn and adapt means it can help human workers find faster, more efficient ways of working themselves, as well as uncover new insights from data that inform more confident human decision making. In any industry where responsiveness counts, this can lead to significant advantage.



Deep Learning

Deep Learning takes the capabilities of Machine Learning to another level. This is particularly powerful in environments with "Big Data" challenges - large quantities of unstructured data, which simpler ML algorithms might struggle to fully understand, and where therefore, commercial or security insights may be missed.

DL therefore incorporates a significant training stage during which it compares data characteristics and teaches itself how to behave when it encounters similar data the next occasion. And the benefits of this can be felt across almost any business unit, from manufacturing and logistics, through to Human Resources and Payroll. Deep learning helps to disentangle any number of abstract data sets and select which features improve performance, continually providing better insights as a result.

DDNA

Cybersecurity is a constant technological battle between security and IT professionals seeking to secure their businesses and threat actors looking to compromise it. Increasingly, artificial intelligence has a powerful role to play in keeping intruders out, whilst allowing verified users easy access to the tools and data they need to fulfil their jobs.

Being able to strike the balance between high security and ease of use is critical, and it's where Quantum's Digital DNA platform really comes into its own.

By applying AI to existing security products – whether at the end-user level (such as Single Sign-On Identity Access Management) through to far-reaching SOAR and SASE applications, Quantum DDNA levels up every aspect of your security perimeter. User behaviours are tracked and mapped against 'known' behaviours, with any changes flagged, while deep learning can be leveraged to inform – and automate better network and application design with a SASE framework.



Applying Quantum AI to Pharmaceuticals

Bringing Order to Complexity in Biopharma

Pharmaceuticals is an industry unlike any other: The difference between being first to market, or not, can be the difference between commercial success and failure. So, how do you ensure that your organisation gives itself the best possible chance to be the next to bring innovation to market?

To win that race, you need to be better and faster at analysing data, more agile in your ability to bring products to market, and more confident in your pricing and demand forecasting. That is where Artificial Intelligence holds the keys to true competitive advantage.

Uncovering the Insight in Complex Datasets

The pharmaceutical industry, by its nature, deals with incredibly complex datasets: Chemical compounds, DNA sequencing and enzyme studies require the support of powerful computerised tools and applications to both minimise error and extrapolate useful accurate information.

At Quantum, we work to with companies looking to leverage Artificial Intelligence to understand those complex datasets with more speed and more confidence. In doing so, we help them augment their ability to identify and diagnose medical issues, establish patients model test criteria, and utilise transformative operational intelligence, all at a pace that simply couldn't be done without the recent technological innovations.

Protecting Customers, Protecting Intellectual Property

Protecting intellectual property in the pharmaceutical space is an incredibly important part of any CIO or CISO's role: not only is that IP often classed as an asset on a company's balance sheet, but its protection is also of great importance to the health and safety of patients.

While traditional data integrity solutions have an important role to play, the need for additional, proactive approaches to data management and security is ever more important.



Bringing artificial intelligence and data analysis to biopharma research and development



Edge Analytics

Enables fast and decentralized learnings to be gathered from IoT sensors on machines and wearables on staff to; improve production quality and yield, detect early signs of failure, and track health and safety.



Industrial Robotics

Industrial robots, also referred to as manufacturing robots, automate repetitive tasks, prevent or reduce human error to a negligible rate, and shift human workers' focus to more productive areas of the operation.



Tracking and forecasting input costs

The extreme price volatility of raw materials has always been a challenge for manufacturers. Businesses have to adapt to the unstable price of raw materials to remain competitive in the market.



Novel opportunities for humans

As Al takes over the manufacturing plant, and automates boring and ordinary human tasks, workers will get to focus on complex and innovative tasks. While Al takes care of unskilled labour, humans can focus on driving innovation and routing their business to advanced levels.



24×7 Operations

While humans are forced to work in shifts, robots are capable of working for 24/7 in the production line. With AI and robotics, businesses can scale rapidly to meet global demand.



Safer Operational Environment

A step towards AI means less human resource have to carry out dangerous and overly laborious work. As robots replace humans and perform normal and risky activities, the number of workplace accidents will decrease.



Condensed Operating Costs

Although, bringing Al into the manufacturing industry would necessitate a huge capital investment, the ROI is significantly high. As intelligent machines start taking care of day-to-day-activities, businesses can enjoy considerably lower operating cost.



Quality Assurance

Al assembly lines are data-driven, interconnected, and autonomous, based on a set of parameters and algorithms that constantly update production guidelines to deliver the best possible drugs to market with each movement recorded for traceability and compliance.



Take the **Next Step**

Whatever your data or security challenge, we possess the expertise, technology and mindset to make a transformative difference to your business.

To arrange a demonstration, schedule a detailed briefing, or simply to talk about your challenges, please get in touch on:

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