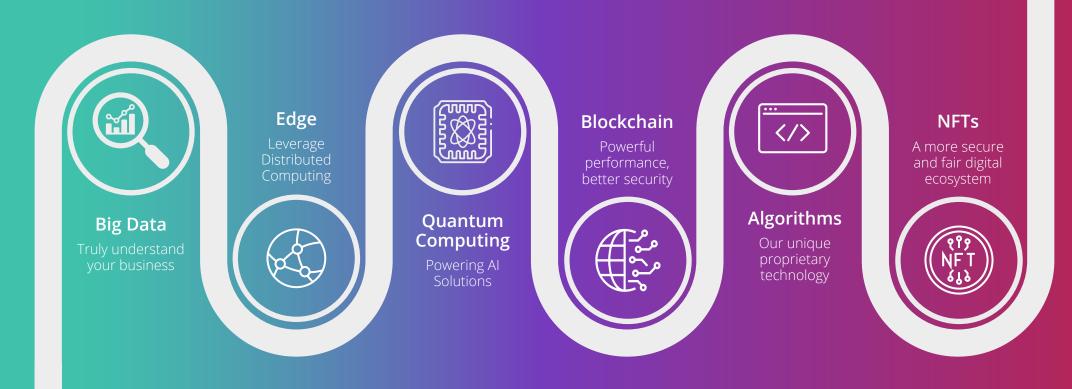
# Make Possible, The Impossible in Transport

Unlocking Al's true potential in the transport sector 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 the Transport Sector

#### **Finding New Opportunities for Growth**

The smooth running of your logistics operations is increasingly dependent on your use and understanding of data. As supply chains have become increasingly diversified and globalised, and customers' expectations around delivery timescales are ever more demanding, the slightest misjudgment or miscalculation can result in major issues.

And yet, so many logistics providers are still reliant on outdated IT infrastructures, and siloed data sets held across warehousing, fleet operations, route planning and port operations. In this context, there is a very real opportunity to leverage the power of AI to understand and foresee fluid market dynamics and supply-demand challenges.

#### A Now Indispensable Planning Tool

Planning is everything in logistics and transport: ensuring drivers take the right route can make the difference between shipments being on time or days late. Planning to ensure you have the right numbers of the right products in the right place can make the difference between busy retail outlets and empty shelves. Preparing for the unexpected and being able to react rapidly to a shift in customer demand or a critically important order, may mean keeping major clients or losing them to a rival.

In all of these cases, the additional accuracy, deep discovery capabilities and learning functions of AI can make a transformative difference to T&L businesses. Quantum's artificial intelligence tools, once applied to your systems, can mine years of historic journeys, stock movements and supply / demand trends to provide an infallibly accurate understanding of previous performance.

#### How Can AI be Optimised for Transport & Logistics?

Scanning, surveillance and automation are increasingly connected in the logistics environment by linking cameras to Al. This is already enabling far-reaching, and otherwise unrealised changes in what have hitherto been considered 'norms'. Thanks to artificial intelligence "seeing" logistics operations in new ways, companies are revisiting their approaches to everything from packaging shapes and sizes through to shipment tracking and surveillance.

Quantum AI sees the merging of advanced camera technologies and AI – already seen in 'autonomous' cars, having a substantial impact on the future of the industry, and one which we expect to be at the forefront of.



## Bringing artificial intelligence and data analysis to logistical processes and automation



#### **Edge analytics**

Enables fast and decentralised learnings to be gathered from multiple datasets and applications within the business and externally.



#### Tracking and forecasting activity

Understanding historic performance and the factors influencing that performance enables accurate, insightful planning of future activities.



#### 24×7 Operations

Optimise operational activities around the clock, respond to live events, and maximise your global logistics by automating key functions with Al.



### 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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