

Executive brief

Embrace next-gen logistics

Unlock quantum-powered analytics for logistics management



Solution

Pre-trained data models that optimize logistics management processes

Built-in machine learning that optimizes models as daily business occurs

No data training required

Quantum annealing compute power that accelerates model times

Platform-agnostic functionality you can add to existing projects and clients

Logistics management has evolved. The modern customer experience now requires rapid shipping and fulfillment, while organizations are looking to optimize end-to-end value chain efficiency and profitability. Add to the list the need to be flexible enough to adapt in real time to frequent supply chain disruptions that your logistics operations will inevitably face.

To embrace this new wave of logistics operations, your transportation management systems and technology must be ready. You need to be able to solve complex shipping challenges in a fraction of the time once required. You can do so with an unrivaled combination of quantum computing, advanced analytics and Al that has the power to optimize all aspects of your logistics management.

With Unisys Quantum IQ, you can analyze trillions of complex factors to make decisions to improve how your goods move through the value chain. Optimize space, freight and route processes in near real time with an advanced analytics solution that uses quantum annealing to compile multiple disparate data sources. Overcome dark data — unstructured data not mapped or documented — challenges and balance customer experience and cost management.

Harness the power of data for logistics management



React in near real time to supply chain disruptions with pre-trained models that leverage both third-party and Unisys' pre-trained data models.



How quickly can you solve a logistic routing problem with 15 delivery locations and three vehicles?

With traditional computing, seven years. With Unisys Quantum IQ, seven seconds.

Rethink your logistics operations with Unisys

Disruptions in the supply chain are a given. Bringing quantum computing and advanced analytics together can quickly resolve your complex shipping challenges. Unisys Quantum IQ takes advantage of quantum's speed and power and provides the structure and decision-making capabilities that Al and advanced analytics offer. The solution connects logistics organizations' three most vital dots — capacity, inventory and routes — that depend on each other to operate smoothly.

Complex problems need innovative solutions. Problems like how to most efficiently pack containers and how to quickly locate packages in a warehouse. And determining the most efficient routing of packages from A to B and the best response to a weather event.

Here's how Unisys Quantum IQ helps optimize logistics management:

Capacity: Ship as many products as quickly as possible by optimizing your loading strategies. Unisys Quantum IQ predicts and prescribes optimal shipping container builds, including pallets, unit load devices and bins. It also lets you adjust day-of departure changes, optimize the loading of carrier vessels and identify unused space for additional carrier revenue.

Inventory: Decipher the complexity of warehouse and distribution inventory locations, constraints and conditions to predict and prescribe locations, packaging requirements,

inventory amounts and freight sensitivity. As a result, you can reduce packing and build times and minimize potential freight damage and spoilage that lead to time-consuming, expensive claims. Optimize your inventory and your warehouses based on the location's specific needs and configuration.

Routes: Optimize your routes — regardless of staffing levels or weather conditions. Unisys Quantum IQ evaluates all potential routes; incorporates dynamic data sets, such as weather and travel times; and determines ideal outbound, break-bulk and reverse logistics routes.

How you benefit

Grow revenue: Expand your business by optimizing your current and future operations. Create lean processes that can help you fulfill more customer demand faster with a next-generation solution.

Achieve operational efficiency: Gain visibility into your supply chain to react and adapt to changes that can disrupt operations.

Incorporate new data sets from diverse sources: Harness the full power of your data to uncover ways to optimize your entire supply chain — all while helping you control costs by reducing operational expenditures and claims and maximizing existing investments in transportation management systems and business intelligence tools.

Embrace next-gen power: The digital supply chain is here. It's time for industry leaders to evolve their operations by embracing next-generation solutions to help drive the supply chain forward.

Improve customer experiences: Avoid cancellations and disruptions while increasing transparency across your value chain. This increased visibility helps you react in near real time to inevitable changes.

Why Unisys?

We've helped optimize air cargo operations for more than 40 years. Now, we're evolving to help transportation companies gain insights into end-to-end cargo operations to deliver unparalleled customer experience, reduce costs and optimize revenue.

When you partner with Unisys, your team grows to include quantum computing and cargo experts working together to create the digital supply chain, starting with logistics optimization.

To explore how Unisys can help you modernize and transform logistics operations, visit us online or contact us today.



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