PARTNER BRIEF

Neo4j + Google Cloud
Transforming Your Supply Chain

Today's supply chains face a crisis that goes beyond their inherent complexity. Companies face shortages of critical parts and materials as well as skilled workers. They experience unforeseen delays as products are held up in ports or at borders. The result: cascading disruptions that start right away. Case in point, by early 2020, a Dun & Bradstreet survey found that 938 of the Fortune 1000 experienced disruption of a tier 1 or tier 2 supplier.

What Era Does Your Data Live In?

There is a new generation of complex data fueling the global economy and the supply chains supporting it. Data is hierarchical, nested, and recursive. And it does not exist on its own; relationships between data provide context that can only be harnessed with graph technology.

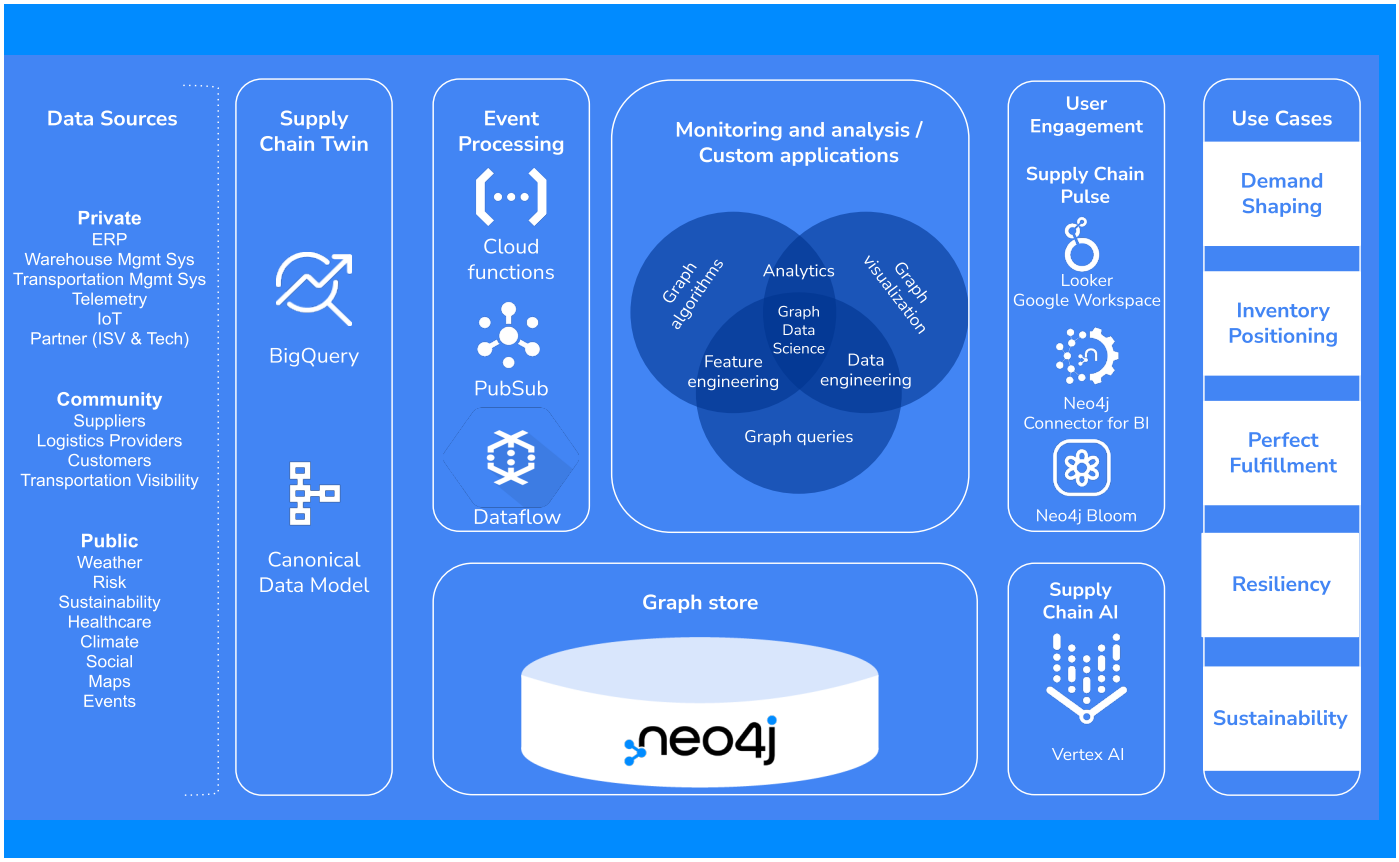
Firms in every industry face a similar challenge. Critical line of business data is siloed in systems of record, locked-down in compliant servers, and even stored as physical documents. Harnessing and analyzing all of that data – and capturing the relationships across it – is an enormous challenge. Google Cloud helps create a central view of supply chain data with its Supply Chain Twin solution.

Working Together to Transform the Supply Chain

Google Cloud and Neo4j share a supply chain vision: Leverage intelligence and predictability to create a transparent, zero-disruption supply chain for everyone.

This actionable vision focuses squarely on business outcomes: building a resilient, sustainable supply chain that delivers exceptional customer experiences. Any solution demands transparency into risks and reliable predictions to mitigate those risks – or avoid them altogether.

Solving the problems of today's dynamic supply chains requires incorporating all the nuances of interconnected supply networks. **The best way to analyze connections across complex supply chains is to model them as a graph,** which captures all the important real-world relationships.



Graph technology allows you to combine all of your data so you can understand and analyze inherent relationships and dependencies that might not otherwise be visible.

Organizing and Orchestrating Supply Chain Data

Google Cloud's Supply Chain Twin solution collects data of all kinds into BigQuery, its industry-leading fully managed data warehouse, as well as into Neo4j, the world's leading graph data platform.

The Supply Chain Twin solution is fed by private data from all relevant business systems including ERP, warehouse and transportation management, and more. Next, data from trusted partners, customers, and logistics firms is shared securely and bidirectionally, enabling essential alignment and collaboration. Public data sources add real-world context, such as weather, risk analysis, maps, events, sustainability, and healthcare data.

All of this supply chain data is organized, orchestrated, and fed into Google BigQuery to support business analytics – and into Neo4j to create a knowledge graph that mirrors the complexity of your supply chain.

Leading-edge AI and machine learning on all of this data drive optimizations along with use cases such as demand shaping, inventory positioning, perfect fulfillment, resiliency, and sustainability.

Google Cloud + Neo4j: Enterprise Expertise

Neo4j is the only graph data platform fully integrated with Google Cloud, giving data scientists, developers, and architects tools and a managed framework that includes an analytics engine, a robust graph data science solution, and an insights layer for exploration.

Neo4j Aura for Google Cloud Platform is the graph data platform quickly becoming the go-to solution for storing, querying, analyzing, and managing highly connected supply chain data. Google Cloud and Neo4j combined provide customers with the most powerful AI/ML and analytics and the market-leading graph technology platform.

> *"We're using Neo4j not just as a data store, but as a place to analyze data and store those new characteristics of that data back in the graph and then extract it for traditional analysis."*
>
> *Eric Wespi*
> *Data Scientist,*
> *Boston Scientific*

Neo4j is the world's leading graph data platform and a global strategic data, analytics, and AI/ML partner with Google Cloud. Google Cloud and Neo4j collaborate to provide customers with end-to-end solutions for their greatest supply chain challenges.

Learn more about Neo4j Aura on Google Cloud or reach out to your Neo4j or Google Cloud representative today. Email us at at ecosystem@neo4j.com.

Questions about Neo4j? Contact us around the globe:

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