Dun & Bradstreet

Dun & Bradstreet Chooses Neo4j to Accelerate Clients’ Compliance with Complex Company Ownership Checks

Dun & Bradstreet helps companies improve business performance through high-quality data and insights, delivered via the latest technology.

In 2016, Dun & Bradstreet adopted Neo4j graph technology to enable a new B2B compliance service for organizations that are obliged to investigate all historic company ownership records linked to individuals, in line with new international transparency regulations designed to counter money laundering and tax evasion.

Neo4j’s ability to efficiently map shareholders’ interests globally, despite complex inter-company dependencies, helps clients accelerate compliance and book new revenues without delay. Hours of manual research by expensive professionals are replaced by millisecond queries and Dun & Bradstreet’s associated business activity is expanding at a double-digit rate.

The Company

Dun & Bradstreet is a world-leading technology and data group. Its Data Cloud delivers the world’s most comprehensive business data and analytical insights from over 350 million business records, from tens of thousands of sources, updated 5 million times a day. The associated insights help business clients accelerate sales, lower costs and manage risk. Companies can access data directly, or as part of specialist solutions and services.

The Challenge

Dun & Bradstreet prides itself on harnessing the most advanced technologies and techniques to deliver its data and insights to clients, through its own services and via partnerships with innovative start-ups with their own ideas for modern, data-based apps and services.

In response to new international transparency requirements around business owners’ historic company interests, the global investigations designed to curb money laundering and other crimes and the considerable research burden for firms’ own skilled teams, Dun & Bradstreet identified an opportunity to provide an accelerated information service. This would empower financial and professional services organizations to complete customer checks swiftly and accurately.

“We already had customers using our business data for existing ‘know your customer’ requirements, but the new ‘beneficial ownership’ mandate was becoming a significant pain point,” explains Paul Westcott, Senior Product Manager, Compliance at Dun & Bradstreet UK. “The investigations call for highly trained staff, and this activity is hard to scale. A single query might tie up key people for 10-15 days, resulting in lost revenue.” And because new business teams can’t legitimately register sales until the checks are completed, any delay could mean a shortfall in revenue.
Dun & Bradstreet saw an opportunity to address this need with a new data-based service. But mapping all of the complex data relationships and maintaining a rapid speed of response would not be possible with traditional approaches to data management.

The Solution

As a technology company, Dun & Bradstreet was already aware of the potential of graph data management technology, and here was a perfectly matched requirement. “Being able to quickly understand relationships between data would give us the ability to rapidly interpret corporate structures and any dilution of ownership of a business,” Westcott says.

Neo4j stood out from the start, not just on the strength and track record of its graph technology, but because of its collaborative approach to creating a targeted solution.

“They immediately saw an opportunity to partner with us to solve a clear business need,” Westcott recalls. “Together we had built the graphs and a working API to collate and send the data to the client in under three months, which is very impressive.”

Neo4j outshone other graph providers with its lead on performance, he adds. “The Neo4j stack, its network of nodes and connections, mean data can be surfaced for an individual in milliseconds – that’s a very quick return of information and was the ideal fit for our needs.”

The Results

Dun & Bradstreet started its graph project in September 2016 and launched its new compliance service by January 2017. “Very quickly it was driving healthy, profitable revenue, which easily justified the cost of the build,” Westcott says. “In 2018, we saw significant double-digit growth in customers and graphs sent out, which has further expanded in 2019.”

Dun & Bradstreet’s plans don’t stop here, either. “This project has opened the door to broader use of graph technology within our business, and we’re now exploring a number of other opportunities,” he says, pointing to immediate potential in honing fraud detection. “The ability to spot patterns and subtle inter-relationships across seemingly disparate pieces of information can drive powerful new insights, which will be of great value to Dun & Bradstreet clients.”

Westcott believes financial and regulatory technology startups will be keen to exploit Dun & Bradstreet’s graph capabilities too, perhaps in conjunction with artificial intelligence/machine learning, to drive new data-based service innovation. “There are some very interesting and agile startups out there, but what they don’t have is access to the 350 million corporate records, or a database with our graph model containing details of 100 million shareholders connected across more than 400 million nodes,” he notes. “We can help them with that.”