Airbnb

Master Data Management Empowers a Global Network of Airbnb Employees

As Airbnb’s workforce rapidly expanded across the globe and their data landscape became increasingly difficult to traverse, productivity was hindered. They sought out Neo4j to assist in creating a fast, user-friendly master data management system known as the Dataportal.

The Company

Airbnb connects people to unique travel experiences with an online sharing marketplace for leasing or renting short-term lodging. Using a variety of search filters, a user can easily wade through the site’s over 4 million renter lodging listings that span 65,000 cities and 191 countries. For the third quarter of 2018, Airbnb announced revenue of more than $1 billion and are valued at $31 billion.

The Challenge

Once a struggling startup, Airbnb has grown into a household name for the online accommodation marketplace. With the company’s success came rapid expansion of their workforce, which currently includes 3,500 employees spread across 20 offices worldwide.

In any large, complex organization, an ever-growing landscape of internal and external data resources – especially when scattered across various platforms – eventually becomes unmanageable and restrictive. After a year at Airbnb, Software Engineer, John Bodley, recognized that Airbnb’s data was prohibitively siloed, inaccessible or lacked proper context.

Bodley also noticed that employees were relying on tribal knowledge for answers to questions, which ultimately stifled productivity. “We often run an employee survey,” he said, “and we consistently scored really poorly around the question: ‘The information I need to do my job is easy to find.’”

He knew they needed to democratize data so any employee, regardless of data-literacy level, was empowered to find resources, fully confident the results were relevant and reliable.

The Strategy

“At a very high level, we just want to search for something,” Bodley said, “so how do we frame our data in a meaningful way for searching, ranking and relevance?”

His team set off developing the Dataportal, a self-service, integrated data-space that presents a contextual, holistic view of Airbnb data for employees to navigate their data landscape easily and quickly.

INDUSTRY
Travel & Hospitality

USE CASE
Master Data Management / Knowledge Graph

GOAL
Create a data resource search engine that’s easy to navigate with reliable results

CHALLENGE
Employees were shackled by siloed data and tribal knowledge, dampening productivity.

SOLUTION
Created the Dataportal using Neo4j to connect disparate data resources.

RESULTS
- Airbnb employees have a one-stop shop for every available data resource.
- Neo4j easily integrated with Airbnb’s existing tech stack for easy programming.

neo4j.com
Neo4j is the leader in graph database technology. As the world’s most widely deployed graph database, we help global brands – including Comcast, NASA, Uber, and Volvo Cars – to reveal and predict how people, processes and systems are interrelated.

Using this relationships-first approach, applications built with Neo4j tackle connected data challenges such as analytics and artificial intelligence, fraud detection, real-time recommendations, and knowledge graphs. Find out more at neo4j.com.

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