BroadJump improves client experiences while reducing storage costs with Couchbase

BroadJump is a healthcare sourcing analytics company that helps organizations gain better visibility and control over their expense management to lower costs, operate more efficiently, and improve quality of care. Using advanced pricing models, BroadJump enables customers to save millions by achieving true pricing transparency. BroadJump switched from Cosmos DB to Couchbase in the Azure cloud to gain features, lower costs, integrate JSON analytics, and use familiar SQL queries.

Challenges

- Improve query latency for faster performance
- Reduce workload on operational data nodes
- Reduce time spent on management processes to speed up innovation cycles

Outcomes

- Improved query performance for complex queries by 500%
- Massively parallel processing engine enables the execution of complex queries
- Consolidated database management cuts development cycle times by over 25%

Industry
- Healthcare

Customer Application
- Supply chain optimization

Solution
- Catalog and inventory management
- Customer 360

Use Case
- User profile
- Caching

Product
- Couchbase Server

Key Features
- Indexing
- Analytics
- SQL++
- Cross data center replication (XDCR)
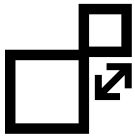
Cloud Provider
- Microsoft Azure

"Couchbase is a trifecta of value. We get more features, save time, and spend less money all at once."

— Philip Lupercio

VP of Technology, BroadJump

In a post-COVID world, medical organizations are renewing their focus on spendingwisely and controlling supply cost inflation. BroadJump is a healthcare analytics company that provides comparison pricing for medical supplies to help clients find and negotiate better deals on contracts and one-off purchases.

THE CHALLENGE: FASTER PERFORMANCE FOR HIGH-SPEED ANALYTICS

To provide clients with the best possible results, BroadJump must efficiently ingest and analyze a wide variety of supply chain data related to products, pharmacies, clinical procedures, and other factors that impact prices.

After their in-house data analyst team cleanses incoming data, BroadJump uses the data to power their applications. For example, one key application is called PriceChecker™. It provides historical and real-time market pricing for supplies and pharmaceuticals, allowing clients to use this information to negotiate best prices.

When Cosmos DB couldn't keep up with their demanding database requirements, BroadJump turned to Couchbase's cloud database platform for the power and features they needed. Couchbase enabled them to reduce query latency, speed up performance, pare down workloads on operational data nodes, and cut the total time spent managing their database.

BroadJump also uses Couchbase to replicate their entire product catalog and run full-text searches. "PriceChecker searches millions of products, categories, and manufacturers," explained Philip Lupercio, BroadJump's VP of Technology. "And Couchbase makes it easy to use the data in a variety of ways without uploading it into a bunch of different systems."

BROADJUMP

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Philip Lupercio,
VP of Technology, BroadJump

THE SOLUTION: REDUCING STORAGE COSTS WHILE PROVIDING MORE VISIBILITY INTO EXPENSE MANAGEMENT DATA
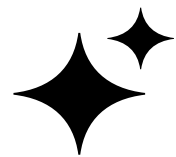
One issue BroadJump had with Cosmos DB was its lack of features, like indexing, which help provide an ideal customer experience. With Couchbase, BroadJump got a full set of rich features at a lower cost.

"We work with huge datasets to provide customers with better visibility and control over their expense management," said Lupercio. "With Couchbase's high-density data storage engine, we dramatically improved our TCO by reducing our overall storage needs by over 50%."

BroadJump's Analyst system is trained by in-house data analysts to automatically recognize all the data it ingests. BroadJump then visualizes the data in a number of different ways. They use it in Microsoft's Power BI. They use it for ad hoc reporting. And they also use it directly to power their application UIs.

Another use case powered by Couchbase involves reviewing data. If a certain data set appears inaccurate, it can be brought back in for analyst review through a dedicated interface.

"Couchbase stores every change that has happened to every line of data through our recognition process," said Lupercio. "We have 2 billion records in that data set right now. So if a client has a question about why something is recognized a certain way, we can go to the line level to give them the answer."

THE RESULTS: COUCHBASE OFFERS A TRIFECTA OF VALUE WITH THE FAMILIARITY OF SQL

Since adopting Couchbase and using its massively parallel processing engine, BroadJump has seen a 500% improvement in query performance for its complex queries. And by using Couchbase to consolidate database management, BroadJump has reduced the time of its development cycles by over 25%.

Another value Couchbase offers BroadJump is familiarity for its developers and analysts. "About 75% of our employees can write SQL, so that's one more reason we like Couchbase over something like MongoDB™," said Lupercio. "Our team can use their existing skill set, and it's much easier to work with."

Couchbase combines the best features of NoSQL document databases and relational databases, and its SQL++ engine enables SQL queries on JSON data. By deploying Couchbase in the cloud, BroadJump's development team can execute complex queries for analytics that improve query performance and provide clients with better price visibility and control over their expense management.

"Couchbase is a trifecta of value," said Lupercio. "We get more features, save time, and spend less money all at once."

Modern customer experiences need a flexible database platform that can power applications spanning from cloud to edge and everything in between. Couchbase's mission is to simplify how developers and architects develop, deploy and run modern applications wherever they are. We have reimagined the database with our fast, flexible and affordable cloud database platform Capella, allowing organizations to quickly build applications that deliver premium experiences to their customers – all with best-in-class price performance. More than 30% of the Fortune 100 trust Couchbase to power their modern applications. For more information, visit **www.couchbase.com** and follow us on X (formerly Twitter) @couchbase.