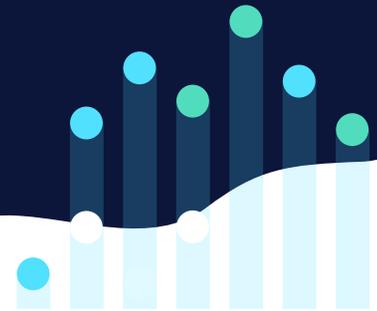


RevTrax Propels Their AI Offering with DataStax Enterprise



THE CHALLENGE

RevTrax provides an AI-based promotional and advertising offer management platform for consumer packaged goods companies and retail brands. The RevTrax platform makes it easier for companies to run smarter offers, track attribution, and drive a higher ROI from their digital marketing efforts.

“The goal of the company has always been to make our clients more efficient and maximize the return on their investment with respect to offers and promotions that they’re running,” said RevTrax Chief Technology Officer and co-founder Greg Hansen. “When we started the company about 11 years ago, the principle was to measure and track everything through the full conversion funnel, which no one else was really doing when it came to in-store sales. Now that we’ve collected all of that data and knowledge, we’re able to really put the platform on autopilot and propel it with our AI offering.”

RevTrax operates in a multi-data center environment. They were using MySQL to handle their large volume of reads and writes, but the relational database was having trouble scaling to meet increasing demand.

THE SOLUTION

RevTrax needed to find a database that could provide guaranteed uptime and seamless scaling. They investigated a number of potential NoSQL solutions until discovering Apache Cassandra™ and learning how it was built to handle large-scale applications in multi-data center environments.

“The main reason for choosing Cassandra was the uptime and also the linear scale,” Hansen said. “If we need to scale out, it’s easier to scale the reads and writes with Cassandra than it is with MySQL. But the real big thing that caught my eye, besides the performance, was Cassandra’s durability. I can have multiple databases, clusters, and data centers spread out all over the world and not worry about any single point of failure. That’s what really sold me on Cassandra.”

The second thing that caught Hansen’s eye was the masterless architecture. “Having a masterless solution was fantastic and super compelling. Then having a company like DataStax to support it, along with some additional tools that are offered, was reason to not use the free version of Cassandra,” says Hansen.

“Our whole infrastructure is powered by Cassandra. There’s way too much that could go wrong and too much to put at risk by not spending a little bit more money or spending the money to get the support that comes with DataStax Enterprise. We really need that.”

USE CASE:

Offers/Customer Loyalty

INDUSTRY:

Digital Marketing

CHALLENGES:

- Unreliable uptime and scalability despite tons of data residing in multiple data centers
- Lack of flexibility to do data center maintenance wherever and however needed
- Concerns over durability around no single point of failure

SOLUTION:

- DataStax Enterprise, the active everywhere database built on Apache Cassandra and designed for hybrid cloud

RESULTS:

- Significantly improved uptime
- 10x improvement in performance

ABOUT REVTRAX:

RevTrax provides an AI-based promotional and advertising offer management platform for consumer-packaged goods companies and retail brands. Using the RevTrax platform, businesses can run smarter offers, track attribution from ad to purchase, and drive higher return on investment (ROI) for their digital marketing campaigns. RevTrax operates in a multi-data center environment. Their MySQL relational database was challenged to scale as demand increased, and they also faced concerns with downtime with a goal of no single point of failure. They selected DataStax Enterprise (DSE) to address these challenges, and results include the ability to scale to meet growing business needs and 10 times increase in performance with zero downtime.



THE RESULTS

Using DSE, RevTrax has been able to significantly reduce downtime in order to meet their ultimate goal of zero downtime.

“Our metric is how long we go without any downtime,” Hansen said. “We’ve been able to achieve that with Cassandra in ways that we could not have with MySQL.”

The other key success metric for RevTrax is performance.

“If you’re making a consumer wait even a couple of seconds to render something on the page, that’s too long,” Hansen said. “Now we get far better performance, call it up to 10 times what we used to get with MySQL, so that’s big.”

The uptime was big, because now instead of having a traditional disaster recovery situation they handle everything with Domain Name System (DNS) load balancing.

“We’ve got multiple data centers, and if one goes down DNS just won’t send traffic there, and we already know that data is in sync in the other data center because it’s already live. Then when the other data center comes back up, Cassandra basically will self-heal, which is fantastic,” says Hansen.

But when they need support, Hansen turns to DataStax. “The support team, engineers, and staff that handle the tickets at DataStax are second to none. The level of support that we get is just outstanding.”

WHAT’S NEXT?

Ultimately, RevTrax would like to implement a third data center to make their environment a true hybrid cloud architecture.

“I would love to have a hybrid environment where we’ve got some nodes running on AWS, and nodes running on Azure, and then some nodes in the physical data center,” Hansen said. “That would be my ideal. That way we really reduce any kind of a point of failure, and at the same time, it’s easy to scale up on the cloud, much easier and faster than it would be in the physical data center.”

And, of course, RevTrax continues to enhance its AI engine.

“We are putting a lot of effort into our data asset and gaining valuable insights for our consumers through artificial intelligence,” Hansen said. “We feel that it will make our clients far more efficient without having to guess, ‘What’s the right offer value?’ Let the machine do it. It can do it at a scale that a human can’t. It can pivot and make decisions faster than a human can ever do it. All the data is there, and clients still have full control, so if they don’t want to use it in every situation, they don’t have to. In order to do that at scale, like I said, we feed all of this data into Cassandra.”

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—Greg Hansen,
Co-founder and CTO
RevTrax

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ABOUT DATASTAX

DataStax delivers the only active everywhere hybrid cloud database built on Apache Cassandra™. DataStax Enterprise and DataStax Distribution of Apache Cassandra, a production-certified, 100% open source compatible distribution of Cassandra with expert support. The foundation for contextual, always-on, real-time, distributed applications at scale, DataStax makes it easy for enterprises to seamlessly build and deploy modern applications in hybrid cloud. DataStax also offers DataStax Managed Services, a fully managed, white-glove service with guaranteed uptime, end-to-end security, and 24x7x365 lights-out management provided by experts at handling enterprise applications at cloud scale. More than 400 of the world’s leading brands like Capital One, Cisco, Comcast, Delta Airlines, eBay, Macy’s, McDonald’s, Safeway, Sony, and Walmart use DataStax to build modern applications that can work across any cloud. For more information, visit www.DataStax.com and follow us on Twitter [@DataStax](https://twitter.com/DataStax).

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