

# NATIVO BUILDS A SCALABLE ADVERTISING ANALYTICS PLATFORM ON SNOWFLAKE

## SOFTWARE



**COMPANY** Nativo  
**LOCATION** El Segundo, California

## SNOWFLAKE WORKLOADS USED



Advertising technology company Nativo is on a mission to equip advertising for the age of content. Brands and publishers rely on its native advertising platform to manage digital advertising campaigns and create meaningful connections with consumers. To provide in-depth reports that help customers measure campaign performance, Nativo ingests and analyzes large amounts of advertisement interaction data.

## STORY HIGHLIGHTS:

### Separate storage and compute

Snowflake's multi-cluster shared data architecture provides a flexible solution for storing and querying large amounts of historical and near real-time campaign data.

### Per-second pricing

With Snowflake, Nativo pays only for the compute resources that it actually uses.

### Fully managed infrastructure

Nativo's engineers spend less time troubleshooting data inconsistencies and more time on projects that increase customer value.

“Snowflake provided a future-proof system with the flexibility to scale up, scale down, and isolate workloads.”

—BIJITH KUMAR, Director, Data Engineering, Nativo

## CHALLENGE:

### Affordably scaling data analytics to support near real-time insights

Nativo's legacy data architecture could not affordably scale to keep pace with growing demand for near real-time campaign analytics. Tightly coupled storage and compute caused Nativo to overpay for compute in order to store 10 years of historical data. Maintaining separate development, QA, staging, and production environments—all running 24/7—compounded the problem.

Despite being overprovisioned for compute, resource contention was problematic during peak use of Nativo's reporting API and customer-facing dashboard. “Too many queries could choke the system, so we had to restrict how and when customers could query data,” Nativo's Director of Data Engineering, Bijith Kumar, said.

Lack of support for joins created time-consuming work for Nativo's engineering team and made it difficult to deploy new data dimensions. Providing detailed insights about unique users and postal codes was not practical from a cost perspective.

Supporting Nativo's NoSQL database was operationally burdensome, especially when identifying and troubleshooting data inconsistencies. Planning, provisioning, and testing new hardware consumed up to 50% of one FTE's time until the upgrade was complete—a process that could take weeks.

2x

Increase in data dimensions

79 TB

Amount of data stored in Snowflake

## SOLUTION:

### A platform for scalable advertising analytics

Realizing the need for a modern data environment, Nativo turned to Snowflake.

Snowflake's multi-cluster shared data architecture scaled to handle Nativo's data, users, and workloads. Usage-based pricing and affordable cloud rates enabled Nativo to store and query 80 TB of data, a 300% increase, for approximately the same total cost of ownership. Flexible capacity scaling eliminated resource contention and enabled the auto-suspension of Nativo's development, QA, and staging environments when not in use. According to Kumar, "Snowflake provided a future-proof system with the flexibility to scale up, scale down, and isolate workloads."

Bulk loading from Amazon S3 simplified the ingestion and aggregation of near real-time data from Nativo's advertising platform. Snowflake's support for joins accelerated innovation at Nativo and enabled it to provide customers with fine-grained insights that were previously not possible.

Snowflake's fully managed infrastructure and access control privileges freed Nativo's technical staff to focus on higher-impact work. Native SQL support made it easier to identify and fix data inconsistencies.

## RESULTS:

### Solidifying a competitive advantage by offering 2x more data dimensions

Architecting on Snowflake enables Nativo to provide twice as many data dimensions that help advertisers and brands maximize campaign performance. Successful campaign outcomes support Nativo's ongoing customer retention initiatives.

Nativo's customer-facing dashboard, powered by Snowflake, is rapidly becoming a differentiator in the market, especially as Nativo rolls out more dimensions. "Prospective customers get excited about our dashboard because it allows them to slice and dice in real time, and provides the ability to perform quick and effective analyses of campaigns, yields, and so on," Kumar said.

“Prospective customers get excited about our dashboard because it allows them to slice and dice in real time, which is a huge advantage during demos.”

—BIJITH KUMAR, Director, Data Engineering, Nativo

### Enhancing the customer experience and increasing transparency

Solving Nativo's resource contention problem with Snowflake frees customers to query their campaign data with fewer limitations. According to Kumar, "Now we give them separate warehouses, so we don't really care what time they query." Isolating workloads makes it easier to quantify the cost of Nativo's queries and users.

### Freeing technical talent to focus on what matters

Streamlining Nativo's infrastructure management with Snowflake elevates efficiency and provides increased peace of mind for engineering staff. In particular, disaster prevention and recovery is no longer a major concern.

“Snowflake completely eliminates that stress. I don't even worry about backups now, which is a huge relief.”

—BIJITH KUMAR, Director, Data Engineering, Nativo

### Elevating insights for internal stakeholders

Interactive dashboards keep Nativo's executives informed about high-level metrics and business performance. Nativo's analysts rely on data-driven insights to help customers optimize existing campaigns and generate ideas. Sales reps use data to pitch new campaign opportunities and drive incremental revenue growth.

## FUTURE:

### Optimizing and predicting data analytics costs with Snowflake

Integrating external demographic data with Snowflake Secure Data Sharing will save time and resources by eliminating one of Nativo's data processing jobs.

Using consumption data from Snowflake to guide feature development decisions is also on the roadmap. According to Kumar, "With this kind of information, we're able to predict a feature's potential impact on our cost and billing strategy."

## ABOUT SNOWFLAKE

Snowflake delivers the Data Cloud—a global network where thousands of organizations mobilize data with near-unlimited scale, concurrency, and performance. Inside the Data Cloud, organizations unite their siloed data, easily discover and securely share governed data, and execute diverse analytic workloads. Wherever data or users live, Snowflake delivers a single and seamless experience across multiple public clouds. Join Snowflake customers, partners, and data providers already taking their businesses to new frontiers in the Data Cloud. [snowflake.com](https://snowflake.com)