snowflake®

KOUNT CONVERTS BILLIONS OF INTERACTIONS INTO ACTIONABLE INSIGHTS WITH SNOWFLAKE

INFORMATION TECHNOLOGY

Kount®
An Equifax Company

COMPANY Kount

LOCATION Boise, Idaho

SNOWFLAKE WORKLOADS USED

DATA ENGINEERING | DATA LAKE | DATA WAREHOUSE | DATA SCIENCE | DATA APPLICATIONS | DATA SHARING

Kount, an Equifax company, exists to protect digital innovation. Kount's Identity Trust Platform analyzes signals from 32 billion interactions per year to prevent fraud and enable personalized customer experiences. To power machine learning models that help more than 9,000 brands protect their customer journeys, Kount collects and analyzes large amounts of data for account creation, login information, and payment transactions.

STORY HIGHLIGHTS:

Separate storage and compute
Data scientists can quickly scale compute resources to process complex data science queries—without impacting data storage costs.

Providing data through Snowflake Data Marketplace
Snowflake Data Marketplace empowers Kount's customers to discover and join data for actionable insights.

Extensive network of connectors, drivers, and programming languages
Connecting Snowflake to machine learning platforms and technologies streamlines Kount's data pipeline.

> ❝ **With native support for structured and semi-structured data, Snowflake as our data lake makes all relevant data for our machine learning models easily accessible."**
>
> **—DIVY MURLI,** Data Scientist, Kount

CHALLENGE:

Accelerating data exploration
Kount's AI relies on massive amounts of near real-time and historical data to determine a customer's trust score, which is defined within 200 milliseconds of an attempted transaction.

Kount's on-premises data environment could not easily scale to handle the company's data volumes and data science workloads, which inhibited data exploration and feature generation. "Certain types of queries either took way too long or wouldn't even run," Kount's Data Scientist, Divy Murli, said.

Responding to a company-wide cloud initiative, Kount's data science team began evaluating alternatives to its Vertica instance. The team considered several solutions, but none offered independent scaling of storage and compute to support Kount's data science needs.

SOLUTION:

Streamlining data science with Snowflake
Realizing the need for modern data infrastructure, Kount turned to Snowflake on AWS as the source of truth. Snowflake fits seamlessly into Kount's data science workflow by integrating with its machine learning toolset. "With native support for structured and semi-structured data, Snowflake as our data lake makes all relevant data for our machine learning models easily accessible," Murli said.

---

32 billion
Number of interactions analyzed per year

10x
Increase in data points provided to customers as a new product offering (Data on Demand) using Snowflake

100x
Faster complex query execution with Snowflake compared to Kount's previous database solutions

Snowflake's fast data processing and elastic performance engine eliminated both access and data preparation limitations that previously slowed down exploration and feature engineering activities. According to Matthew Jones, Data Science Manager at Kount, "The elasticity and near-zero maintenance of Snowflake enables our data science team to elevate our productivity by spending less time preparing data, so they can spend more time building models."

RESULTS:

Creating a product that gives customers control to surface new insights

Enterprise customers needed a convenient way to access raw data collected by Kount and perform their own advanced analytics. According to Murli, "Customers saw what we could do with the data, and they wanted a comparable level of control."

Built upon Snowflake, **Kount's Data on Demand** solution provides access to transaction data that empowers customers to perform in-depth analysis, generate personalized reporting, and create customized machine learning models. Using Snowflake Secure Data Sharing technology, Kount, as a data provider, has provided this solution through **Snowflake Data Marketplace** to simplify the discovery and combining of data for richer insights.

For example, marketing teams use Data on Demand to understand buying patterns among demographic groups, identify cohorts of returning buyers, and develop customized campaigns that support revenue growth. Data scientists use it to efficiently explore large data sets and generate new insights for a variety of use cases. According to Murli, "Going beyond fraud, our platform helps customers find insights to specific business problems."

> **With Snowflake, we can easily do different types of aggregations. For example, I can pull transactions and attributes from different tables and join them together. This is particularly important at Kount because data transparency is one of our biggest differentiators, and none of our competitors provides this amount of data back to their customers."**
>
> **—MATTHEW JONES,** Data Science Manager, Kount

Gaining a competitive edge with contextualized data

Architecting Kount's data lake on Snowflake makes it possible to support 10x more data points and supply customers with contextualized data. This contextualization enables customers to see how their data fits within Kount's vast Identity Trust Global Network, which they can use to make actionable insights for their business.

According to Jones, "With Snowflake, we can easily do different types of aggregations. For example, I can pull transactions and attributes from different tables and join them together. This is particularly important at Kount because data transparency is one of our biggest differentiators, and none of our competitors provides this amount of data back to their customers."

> **Snowflake has been immensely impactful for us data scientists. We can consolidate data into one massive data lake as the single source of truth, yet it's all easily queryable. This is just the starting point of Snowflake's true potential at Kount. Things that were very hard to do—or nearly impossible—with our on-premises infrastructure can be done in minutes on Snowflake."**
>
> **—MATTHEW JONES,** Data Science Manager, Kount

FUTURE:

Increasing Snowflake's impact on data science

Migrating Kount's entire feature engineering pipeline to the cloud is the next priority. "As we continue to move to the cloud, we want our feature engineering pipeline to run completely on Snowflake, including steps written in Python," Murli said. "We're excited for Snowpark, which in the future will support Python-based pipelines, and will enable us to do just that."

According to Jones, "Running all of our feature engineering in Snowflake using Snowpark will further accelerate all of the data preparation steps so that we can focus on model building."

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**

snowflake.com   #MobilizeYourData