

VIX TECHNOLOGY OFFERS REAL-TIME ACCESS TO CUSTOMER DATA WITH SNOWFLAKE

TRANSPORTATION



COMPANY Vix Technology
LOCATION Cambridge, U.K.

SNOWFLAKE WORKLOADS USED



Founded in 1987, Vix Technology is a leading provider of public transport ticketing systems. The company's 550 employees have completed projects in more than 200 cities around the world.

STORY HIGHLIGHTS:

Cloud-agnostic platform

Snowflake allowed Vix Technology to remain with AWS, its preferred storage service, while also significantly improving its ability to manage and query data.

Customer self-service

By enabling API access to data within Snowflake, customers are able to access and analyze data how and when they require. The need to wait for manually generated reports has been removed.

Future-proof platform

The ability to rapidly scale Snowflake's platform will allow Vix Technology to expand its capabilities as its customer base grows in the future.

“We realized we needed to find a way to provide our clients with real-time access to their data. We could clearly see that this would not be possible using our existing database infrastructure, and so the search began for a replacement.”

—SEAN LANGTON, Chief Technology Officer, Vix Technology

CHALLENGE:

Overcoming constraints to generating customer reports

During the past 30 years, as Vix Technology expanded its customer base, the company realized it was facing a significant challenge when it came to making use of data.

Data collected from its ticketing systems in cities around the world included details on ticket sales, passenger movements, and daily usage patterns across train, tram, and bus networks.

“We had been storing all our customer data in a single, monolithic, transactional database hosted in AWS,” said Vix Technology's Chief Technology Officer, Sean Langton. “However, the way this data could be used was very limited.”

Reports for customers were generated each day as PDF documents and CSV files; however, there was no ability to perform in-depth analysis using analytics or visualization tools. As a result, customers were missing out on potentially valuable insights into how their transportation infrastructures were performing.

SOLUTION:

A flexible, powerful solution designed for the cloud

In late 2019, working with technology partner Versent, the Vix Technology IT team undertook an extensive review of a range of alternative database platforms. After gaining an understanding of all the options, it quickly became clear that Snowflake provided the best possible fit.

50%

Reduction in operational costs

150

Number of tailored reports generated by clients each month

13 weeks

How quickly new capabilities were rolled out to customers after Snowflake was implemented

1

Single view of operational performance for KPIs and SLAs

"Architecturally, we knew that we wanted to be cloud native on AWS because we could see that would give us cost efficiencies and access to future innovations," Langton said. "Amazon's RedShift was not an option as you have to purchase a significant amount of compute and storage up front. For this reason, Snowflake was clearly our preferred choice."

In addition, the fact that Snowflake was designed for the cloud from the outset was another appealing factor. Other features such as fine-grained access control and access to marketplaces also helped to seal the deal.

The decision to deploy Snowflake was made in October 2019. Within 13 weeks, new capabilities had been made available to the first customer with others following during the next six months. All final work was completed by January 2020.

"It's made a massive difference for us as a company. Snowflake has provided us with the platform we need to extract far more value from the large stores of data we have at our disposal."

—SEAN LANGTON, Chief Technology Officer, Vix Technology

RESULTS:

Automated report generation

With the Snowflake infrastructure in place, Vix Technology quickly enjoyed some significant benefits.

"Before this project, we were facing the prospect of having to manually produce 150 tailored reports generated by clients each month, which was very expensive and rather limited in terms of the insight those reports could deliver," said Langton. "Now, we are able to offer our clients self-service access to their data in real time. It's been a massive step forward for us."

Real-time view of operations

Having deep access to data means the company's customers are able to understand what is going on in real time within their transport networks. They have access to a series of customized dashboards that allow them to slice and dice their data in any way they wish using whatever tools they choose.

For example, transport operators can view passenger movement data and overlay additional data that may have an impact on these patterns, such as large sporting events, weather conditions, and holidays. This means that timetables can be shifted to better match changing demand. Innovative options such as real-time ticket price changes can also be introduced to flatten out peak periods.

"Our customers are really able to fine-tune their operations with decisions being made on real-time data," Langton said. "This results in a much better travel experience for all public transport users."

"Overall, our aim is to become a much more data-driven organization. Working with Snowflake, we intend to continue to grow our offerings for customers in new and exciting ways."

—SEAN LANGTON, Chief Technology Officer, Vix Technology

Massive reduction in costs

Internally, the shift to Snowflake has resulted in a 50% reduction in operational costs. Database administrators have also been freed from needing to produce reports and can focus their time and efforts in other areas.

According to Langton, "It's made a massive difference for us as a company. Snowflake has provided us with the platform we need to extract far more value from the large stores of data we have at our disposal."

FUTURE:

Sharing and monetizing data

Vix Technology plans to use the highly visual outputs that can be generated from Snowflake to explain to prospective new customers just what is possible. Rather than being limited to talking about technical specifications, it can show what can be achieved once data can be queried and analyzed.

"In the future, we will be looking at how we can put Snowflake Data Marketplace's capabilities to work," Langton said. "APIs could be used to provide an additional source of income by making data available to other interested parties."

Langton's team is also looking at how business intelligence tools can be put to work on the data and, ultimately, at applying machine learning and artificial intelligence to the data. It is anticipated these tools will be able to provide even better insights that can guide operations and reduce costs.

"Overall, our aim is to become a much more data-driven organization," said Langton. "Working with Snowflake, we intend to continue to grow our offerings for customers in new and exciting ways."

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://www.snowflake.com)