

BIG FISH GAMES LAUNCHES AND DEVELOPS GAMES FASTER WITH SNOWFLAKE

MOBILE GAMES



COMPANY Big Fish Games
LOCATION Seattle, Washington

SNOWFLAKE WORKLOADS USED



Big Fish Games is a developer and publisher of a diverse portfolio of casual game franchises, including Big Fish Casino, EverMerge, Gummy Drop, Fairway Solitaire, Jackpot Magic Slots, and Cooking Craze. The company serves millions of players every day and is dedicated to providing players with the opportunity to play, connect, compete, and discover anywhere and on any device.

STORY HIGHLIGHTS:

Live launch cycles in near real time

Faster access to data through Snowflake enables Big Fish Games to conduct live launch analysis in near real time and fine-tune the game.

Secure, external data sharing

With the partitioning and allocation of compute resources provided by Snowflake, Big Fish Games provides external developers with a platform they can work autonomously within to analyze, transform, and share data.

Near-instant elasticity

With Snowflake, Big Fish Games can enable nearly any amount of computing power for virtually any number of users for internal and external partners.

“Snowflake’s data sharing across clouds is one of its big pros. The gaming industry relies on external partners for faster game development and time to market. Having good data governance to ensure that live data can be shared without movement across cloud providers is key to that model.”

—GLEN MACKAY,
Senior Manager, Data Engineering, Big Fish Games

CHALLENGE:

Understanding player engagement

With its library of popular online games, Big Fish Games sought to use in-game analytics data to measure, understand, and optimize game dynamics. For example, the LiveOps team wanted to introduce a game event and quickly measure how engaged the players were by the new content. However, slow ETL jobs delayed their ability to make game updates based on engagement. According to Big Fish Games’ Senior Manager, Data Engineering, Glen MacKay, “We had to wait until the next day to assess player uptake and engagement. Did players love the feature as much as we thought they would? We didn’t know right away. What we wanted was to see the uptake and engagement as it was happening.”

The gaming company moved to Google BigQuery to address the performance challenges. However, MacKay’s team was still the central clearinghouse for data requests. His team was still the bottleneck to data access for these downstream users because the data had to be processed first. And his team was stretched because they were responsible for the pipelines that brought in external data from partners and connected third-party studios and developers with data. When they saw the sister company was using Snowflake for pipelines, they looked into it for its ability to share data without moving/copying data, relieving pressure on their team.

SOLUTION:

Seamless data sharing with third-party studios and game developers

Big Fish Games was on GCP, but its sister company was running Snowflake on Amazon Web Services. Snowflake’s ability to run consistently on multiple clouds allowed Big Fish Games to both

99%

Faster time to analytics after releasing new in-game missions and other live-ops content

stay on GCP, simplifying its migration from Google BigQuery, and be on the same platform as key partner organizations, even though those organizations may be on a different cloud platform. Snowflake allows Big Fish Games to run on the cloud of its choice, while easily sharing live data right into the analytics platform its partners already use, giving it consistency and compatibility, and driving increased business value.

Big Fish Games uses Snowflake to give external partners semi-autonomy to independently work within its organization. "Live data can be shared without movement; that's really the goal. External teams are provisioned to a specific warehouse and Looker account, along with access to specific schemas. They go in and do their work, and at the end of day, we send them the bill for whatever compute they use," said MacKay.

Some third-party developers and studios may work in different public clouds. According to MacKay, "Snowflake allows us to not be locked within GCP, and allows us to collaborate with diverse partners. With Google BigQuery, sharing data with proper governance was still a manual process that required a lot of overhead to manage access rights and billing."

RESULTS:

Access to near real-time streaming analytics

Big Fish Games' earlier challenge was slow ETL loads, which prevented game developers from assessing in-game data and event streams. With Snowflake, developers, business analysts, and data scientists now have direct access to custom event data and event streams. "Snowflake enabled us to relieve a prior bottleneck. Now, the raw event stream is available and users can go in, dig around, and build tables on top of it. They no longer have to wait for us," MacKay said.

"The product team and LiveOps team love the streaming analytics capability through Snowflake, and even the executive team is very excited to see the potential there is to interact with and understand our users at the time scale of the game experience."

—GLEN MACKAY,
Senior Manager, Data Engineering, Big Fish Games

Feedback loops that improve the gaming experience

When new content, such as game missions are released, Big Fish Games now has near real-time visibility into player actions and can observe their activity. Live launch analysis cycles previously required a mission to be complete, averaging four to seven days, before data scientists could pull data for analysis and provide game developers with recommendations about subsequent game missions.

According to MacKay, "With Snowflake, we're able to get feedback earlier, hours into a game mission being launched. Then we're able to re-tune it. In the past, we'd run multiple missions without having the chance to re-tune them. These feedback loops are creating a greater gaming experience closer to real time."

"We're now able to focus on big picture expectations for game play and continuously add new missions. Snowflake allows us to access early, data-driven feedback to fine-tune the game instead of waiting for it to run its course."

—GLEN MACKAY,
Senior Manager, Data Engineering, Big Fish Games

Quicker activation of new games

With Snowflake, Big Fish Games can accelerate the activation of new games. MacKay's team is working to standardize the reporting process. When a new game is activated, they provide a core set of 6–8 reports. When the standardization is complete, they can turn on a new game in a matter of days, compared to weeks or months under the former model. According to MacKay, "We've already had a couple of successes. In the next couple of weeks, we're going to be turning on several games with the intent of activating them one right after another."

FUTURE:

Extending Snowflake's value to the rest of the company

Going forward, Big Fish Games can rely on Snowflake to connect data to its future workloads. Data scientists can directly work on custom event streams being collected for analysis. In addition, they'll ingest additional data from the finance organization to facilitate business-level reporting for company executives. For leadership, MacKay's team plans to create dashboards to display KPIs and top-level metrics across the company's game portfolio. "While we expedite turning on new games in this new system with Snowflake, we'll be bringing its full functionality to the rest of the company as well," said MacKay.

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)