Speed and Agility

aws

The Quest to Provide Timely Data

Over the last several years, the TOUR has strived to become the sole owner and data distributor of elite, championship-level golf, and has committed to providing high-quality information to its members and fans across the world.

To do that, the TOUR needed to modernize and improve its broadcast tools. The TOURs legacy systems built on AS400 and DB2 lacked the agility to quickly deliver data to end users. Legacy processes led to multiple days' worth of weekly reconciliation. Broadcasters wanted more; the TOUR could not provide fast enough. On top of that, the TOUR was getting ready to sunset the DB2 systems, switching all end users over to their cloud-based data distribution platform.

CLIENT
PGA TOUR

INDUSTRY
Sports

SERVICES
Redshift, S3, Lambda

AWS Enables an Agile Platform

The PGA TOUR has spent years working to modernize its scoring and data distribution systems with CapTech, a trusted partner in innovation and modernization. With a wealth of golf data domain knowledge, it was uniquely positioned to build a modern data product to provide analysts with the tools they needed to create an engaging TV broadcast. The TOUR's partnership with AWS gave them access to the extensive suite of services that provided reliability and speed in the cloud. AWS also eliminates costly hardware maintenance, while increasing the ceiling for expansion and continued innovation.

Powering the Modern Golf Broadcast

Today's sports fans want more statistics and more insights. As the sole owner and data distributor of golf statistics data, the PGA TOUR, (the TOUR), the premier golf membership organization for touring professionals, provides broadcast partners like NBC and CBS delivery of statistics and information via dashboards of reports; however, the data had been somewhat limited in scope.

CapTech Ventures, Inc. (CapTech) collaborated with AWS to modernize the TOUR's dashboards and data load process from legacy technologies and weekly refresh to a dynamic data product leveraging AWS S3, Redshift, and Lambda, ultimately enabling dynamic and advanced analysis on the fly.

CapTech proposed a phased approach. First, recreate the existing dashboard solution on a modern technology stack that provides faster refreshes. Then, automate and template common analyses while enhancing the ability to provide deeper analyses of relevant statistics.
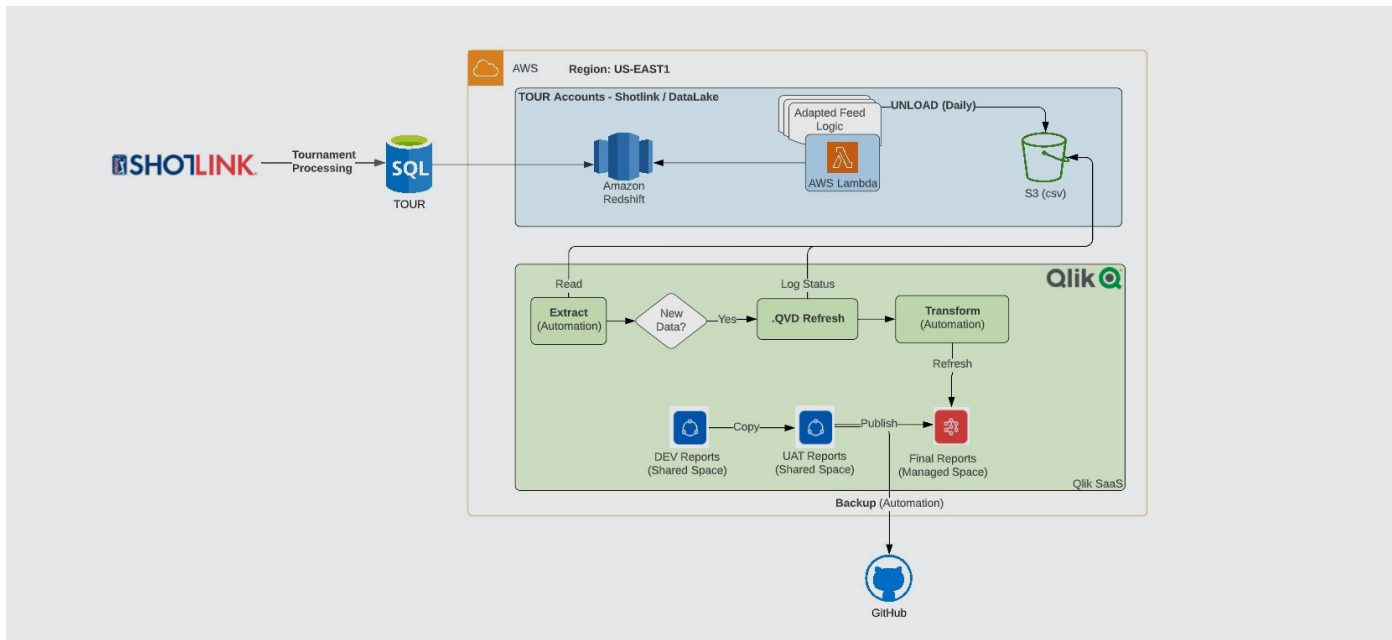
CapTech used an existing data ingestion pipeline that pulls live data from ShotLink, which captures information on every shot, by every player, in real-time during tournaments, along with historically processed tournament data, into Amazon Redshift. CapTech then built a serverless application to generate CSV files to be ingested into QlikSense, an app that enables users to create data visualizations and interactive dashboards. Written in Python, the application runs in AWS Lamda creating daily unloads of consolidated tournament, statistic, and player information to an S3 bucket. After that, an AWS cloud-native instance of QlikSense automatically reads and extracts the files in the S3 bucket. If there is new data, then it runs a QlikView Data (QVD) refresh, which converts the data into dynamic reports.

After the migration was validated and refreshes were improved from weekly to daily, CapTech looked for opportunities for enhancements. Working with the TOUR team, it determined that creating 19 templates for pre-tournament analysis would eliminate days of manual prep work. In addition, CapTech created a baseline generator that automatically generated a 5-year strokes gained baseline, but also allowed for custom baselines to be created as needed.

More Engaging Broadcasts

These new views and custom dashboards better equip broadcast production teams with access to real-time contextual insights as stories unfold in a PGA TOUR telecast.

Saved multiple days of pre-tournament analysis and preparation

Improved data load from weekly process to daily

Enabled implementation of live tournament data