nClouds | AWS Case Studies
Leading Wine & Spirits Company

How nClouds helped a Leading Wine & Spirits Company streamline data acquisition, data wrangling, and integrated business analytics to enhance B2C marketing and e-commerce.

Industry
Wine & Spirits

Location
United States

Challenge
Create a flexible data integration infrastructure to streamline data acquisition, data wrangling, and integrated business analytics to enhance B2C marketing and e-commerce.

Featured Services
Data & Analytics Services

About Leading Wine & Spirits Company

The company is a leading producer and distributor of wine and spirits.

Benefits Summary

Enhanced marketing capabilities	Faster data warehousing and business analytics	Increased efficiency and reduced costs

CHALLENGE

Create a flexible data integration infrastructure to streamline data acquisition, data wrangling, and integrated business analytics to enhance B2C marketing and e-commerce.

Why AWS and nClouds

While evaluating partners, the company sought out nClouds based on its experience and AWS Competency in Data and Analytics. After a series of discovery meetings, the company was impressed with nClouds' reputation, vision, collaborative approach, and demonstrated customer success.

Leading Wine & Spirits Company leveraged several Amazon Web Services:

- **Amazon Athena (Athena)** - An interactive query service that makes it easy to analyze data in Amazon S3 using standard SQL. Athena is serverless, so there is no infrastructure to manage, and you pay only for the queries you run.

- **Amazon EC2 Reserved Instances (RIs)** - Provides the company with a significant discount (up to 75%) compared to On-Demand pricing and provides a capacity reservation when used in a specific Availability Zone (AZ).
- **Amazon Elastic Compute Cloud (Amazon EC2)** - A web service that provides the company with secure, resizable compute capacity in the cloud.
- **Amazon Redshift** - Enables the company to analyze all its business data using existing business intelligence tools.
- **Amazon SageMaker** - A fully managed service that covers the entire machine learning workflow to label and prepare the company's data, choose an algorithm, train the algorithm, tune and optimize it for deployment, make predictions, and take action.
- **Amazon Simple Storage Service (Amazon S3)** - A flexible way to store and retrieve data, providing the company with cost optimization, access control, and compliance.
- **AWS Glue** - A fully managed ETL (extract, transform, and load) service that makes it simple and cost-effective to categorize your data, clean it, enrich it, and move it reliably between various data stores and data streams.
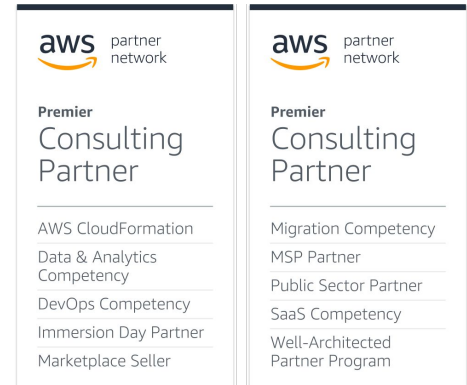
Leading Wine & Spirits Company's solution stack also included additional, essential third-party tools:

- **Avro2parquet** - A Hadoop MapReduce program to convert Avro data files to Parquet format.
- **Google Analytics** - A web analytics service offered by Google that tracks and reports website traffic, currently as a platform inside the Google Marketing Platform brand.
- **Google BigQuery** - A serverless, highly scalable, and cost-effective multi-cloud data warehouse designed for business agility
- **JupyterHub** - A multi-user server that manages and proxies multiple instances of the single-user Jupyter notebook server.
- **Microsoft SQL Server** - A relational database management system developed and marketed by Microsoft built on top of SQL. It runs on Windows and Linux.
- **MicroStrategy** - A BI and analytics platform that helps the company build and deploy cloud-based, hyperintelligent apps.
- **nCodeLibrary** - An extensive infrastructure as code (IaC) library from nClouds that simplifies provisioning resources in AWS. nCodeLibrary allows you to quickly spin up cloud environments based on pre-designed configurations that have been previously tested and optimized by the nClouds engineering team.
- **PySpark** - An interface for Apache Spark in Python that allows the company to write Spark applications using Python APIs and provides the PySpark shell for interactively analyzing data in a distributed environment.
- **Salesforce** - Customer relationship management (CRM) platform.
- **StreamSets** - A data engineering platform dedicated to building the smart data pipelines needed to power DataOps across hybrid and multi-cloud architectures.

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aws partner network

Premier
Consulting Partner

AWS CloudFormation
Data & Analytics Competency
DevOps Competency
Immersion Day Partner
Marketplace Seller

aws partner network

Premier
Consulting Partner

Migration Competency
MSP Partner
Public Sector Partner
SaaS Competency
Well-Architected Partner Program

" nClouds' competency in data and analytics helped our company decrease the time required for data wrangling and curation and improve the accuracy of our consumer insights. Thanks to nClouds' partnership with our teams, we were able to accelerate the preparation of the data models for our EDW migration initiative."

CTO,
Leading Wine & Spirits Company

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nClouds' Solution Architecture for Leading Wine & Spirits Company

nClouds advocated and implemented an infrastructure with a design that prioritized business methodologies alongside key technical considerations. The first step was to understand the business-value drivers from the top-level requirements down to the staff's day-to-day needs. nClouds learned that the company needed the new infrastructure to improve business operations, B2C target marketing and e-commerce, and deliver ROI.

The new data integration infrastructure accelerates the company's data acquisition, data wrangling, and integrated business analytics processes. nClouds optimized the configuration of data movement, developed a deduplication algorithm to handle the merging of customer accounts, and enhanced the company's data models as a precursor to migrating the Leading Wine & Spirits Company's enterprise data warehouse (EDW).

High-level architecture diagram:
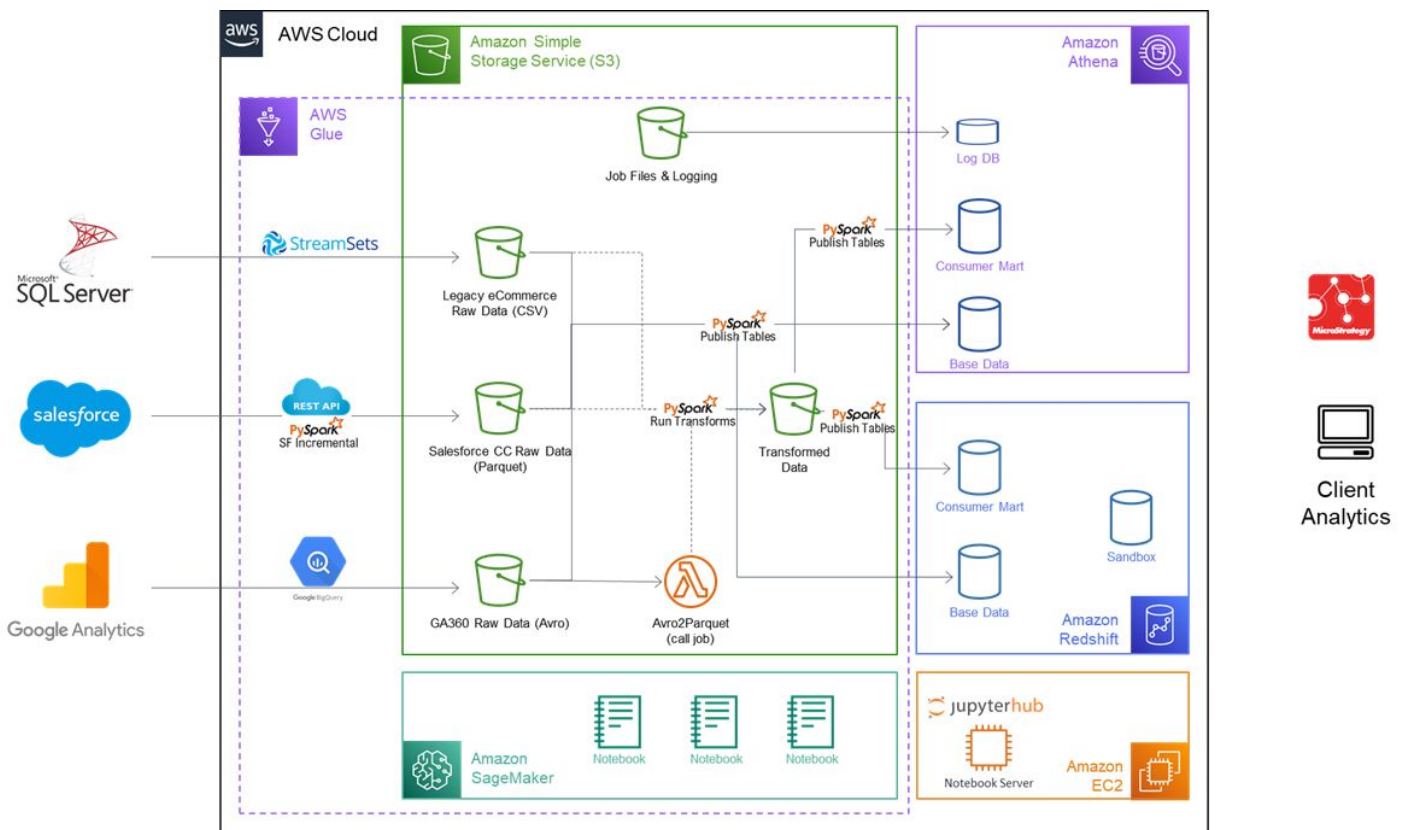
The Benefits

Teaming with nClouds, 6Connex moved from an on-premises infrastructure to a highly adaptable, scalable, and effective infrastructure in the cloud. The project has yielded numerous benefits:

Enhanced marketing capabilities

The new infrastructure's streamlined data management and integration with Salesforce and Google Analytics provide intuitive, 360-degree views of the company's customers for enhanced target marketing and outcomes-based evaluation of marketing campaigns.

Faster data warehousing and business analytics

The shift from complicated, time-consuming code customization to metadata-driven data engineering standardizes data ingestion and accelerates the integration of the Leading Wine & Spirits Company's disparate data sources. The new data integration infrastructure delivers speedier data acquisition, data wrangling, and integrated business analytics. It's more scalable, easier to maintain, and provides more flexibility during the process of incorporating different data sources into the company's enterprise data warehouse (EDW).

Increased efficiency and reduced costs

Reusable metadata and repeatable processes deliver increased efficiency and reduced costs. nClouds' migration of the company's EDW has decreased complexity and lowered the total cost of ownership of the company's curated data. Cost optimization is also derived by the use of Athena, RIs, Amazon S3, and AWS Glue.

About nClouds

nClouds is a certified, award-winning provider of AWS and DevOps consulting and implementation services. We partner with our customers, as extensions of their teams, to build and manage modern infrastructure solutions that deliver innovation faster. We leap beyond the status quo.