

Data Management & Analytics Solution for an E-commerce Agency

Introduction

The client is a leading full-service e-commerce agency with a diverse portfolio of over 500 clients worldwide, spanning across North America, Europe, and Asia. They specialize in optimizing clients' return on investment and managing their brand presence on major e-commerce platforms. Their services range from improving visibility and stabilizing cash flow to analyzing remittances and providing hourly active reporting.

Need

Our client with a large portfolio of clients active across various e-commerce platforms, required a comprehensive solution for data collection, aggregation, and analysis to support live campaign management, reporting, and strategy optimization. They needed a unified, verifiable source of data to bridge silos and support the creation of complex internal reporting and client-facing dashboards. Additionally, they sought to utilize historical data to optimize advertisement management across different platforms, taking into account relevant metrics in a weighted manner.

Solution

Contata was engaged as a team of data science experts to work closely with stakeholders to collect, cleanse, transform, and unify data from various sources, by creating resilient and dynamic workflows that enable real-time reporting and decision-making. The team extracted data from multiple e-commerce platforms' APIs (more than 50 endpoints) and stored it in an AWS RDS Data Warehouse, utilizing AWS Glue and EC2 machines. This warehouse served as a single, verified source of truth for all enterprise reporting.

To ensure the most accurate data, processes were put in place to continuously re-fetch and update historical data and to synchronize it with changing metrics on the platforms (such as returns). These efforts facilitated the use of the most accurate KPI values by our advanced machine learning algorithm. Data security measures were implemented to ensure that confidential data was secured both at rest and in transit.

Daily ETL runs were monitored through an automated operations dashboard, and notifications were sent using AWS SES alerts to ensure smooth operations and quick resolution of any issues that arise.

Advantage

98%

Accuracy instilled in the system, within 24 hours, to match providers, on account of changing historical performance data. Remaining covered in 2 days.

+1

Single unified platform built out to dynamically manage campaigns across multiple platforms, with custom controls

40+

Data endpoints across multiple e-commerce platforms integrated into warehouse for ML and analytics

Industry

E-Commerce

Brand Management

Our Services

Data warehouse

Reporting/Self-Service BI

Advanced ML

Data ETL

Data Governance

De-duplication

Technology Stack

AWS Glue

SQL

AWS EC2

AWS RDS

Spark

Python

AWS Lambda

Tableau

React JS

Node JS

Power BI

AWS SES

