

Modernizing Data Management and Reporting for a Fashion & Home Decor Retailer: Leveraging AWS and Data Pipelines

In this case study, our customer is a fashion retailer with an omni-channel presence, selling directly through catalogs and a website and through online and brick-and-mortar retailers such as Amazon, Sears, and Kohl's. They also have a proprietary marketplace through a digital platform that opens up their website to third-party sellers and brands. They have a global presence, focusing on the UK, Germany, and Japan.

Their business objective was to migrate their legacy SAS processes to AWS, create feature engineering and MLOps pipelines, and create reports to make business decisions based on the generated insights.



The Background

Our Client is a fashion retailer with an omni-channel presence, who wants to move their data and applications to AWS, develop a way to generate features and models from their data, and create a way to generate reports from those models. This would allow them to make better business decisions based on their data.

Key Challenges

The organization is currently facing several significant challenges. One prominent issue is the lack of cross-functional collaboration, resulting in a fragmented and isolated approach to implementation. This has led to persistent data quality problems that continue to undermine operations.

Moreover, the absence of strong, comprehensive data and machine learning pipelines within the data ecosystem has further exacerbated the existing issues. Compounding these challenges is the organization's inability to produce reports with regular data updates, hindering its ability to derive timely and accurate insights.

Drive change with
end-to-end solutions.

Our Solution

Tiger Analytics was chosen by the client as a key partner to spearhead the development of various essential pipelines, including:

- ↗ **Feature engineering and model generation pipelines**
- ↗ **Business reports generation pipelines**
- ↗ **Data ingest and audit pipelines**

The project involved the following:

- ↗ **Collaborating** closely with both business stakeholders and IT stakeholders to steer strategic initiatives and execute tactical use cases.
- ↗ **Revamping and facilitating** the establishment of data ingestion pipelines.
- ↗ Establishing **feature engineering and model training pipelines** utilizing serverless components.
- ↗ Transferring the existing reports and establishing an **insights generation pipeline** that operates based on predefined schedules and triggered events.
- ↗ Setting up a **comprehensive CI/CD pipeline** to enable seamless integration and deployment of artifacts.
- ↗ **Overseeing and managing** all AWS cloud components using Infrastructure as Code (IAC) Terraform.

This comprehensive solution aims to leverage modern cloud-based technologies and best practices to provide the client with an efficient and scalable solution for their personnel data management needs.

Tech Stack

/ AWS Glue

/ AWS Lambda

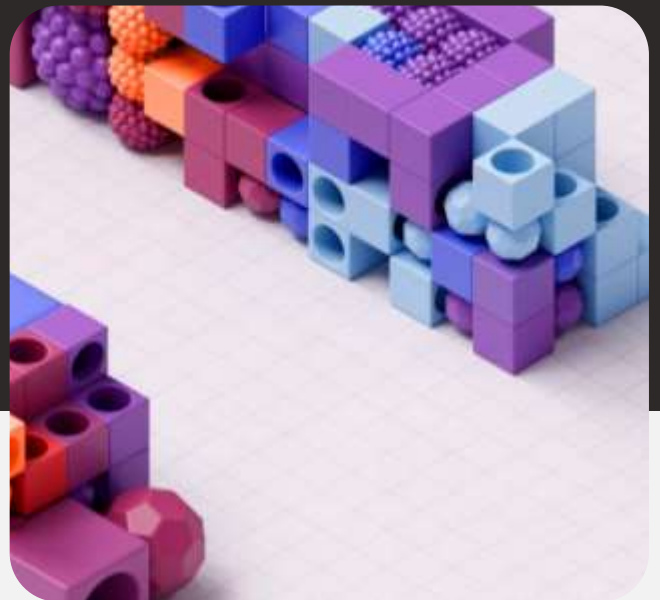
/ AWS S3

/ Airflow

Value Delivered



AWS Glue simplified data migration and reporting by eliminating the need to rewrite existing ETL jobs and standardizing reports. This helped to significantly reduce the cost and complexity of these tasks. Now, businesses can easily migrate their data to AWS and generate insights to make better decisions.



About Us

Tiger Analytics is a global leader in AI and analytics, helping Fortune 1000 companies solve their toughest challenges.

We offer full-stack AI and analytics services & solutions to help businesses achieve real outcomes and value at scale. We are on a mission to push the boundaries of what AI and analytics can do to help enterprises navigate uncertainty and move forward decisively. Our purpose is to provide certainty to shape a better tomorrow.

Being a recipient of multiple industry awards and recognitions, we have 4000+ technologists and consultants, working from multiple cities in 5 continents.

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