



OTT Ad Platform Processes 10 Billion Ad Calls a Day

Case Study



partner
network

SaaS Architecture
Competency

High-value asset monitoring platform leverages AI & ML in SaaS platform

Discover how CloudGeometry helped Krypton Cloud implement a scalable cloud-native architecture on AWS, enabling real-time asset intelligence and remote operations for improved maintenance and cost reduction.

INDUSTRY

Digital Media & Marketing

SOLUTION

Data Integration, Machine Learning, Analytics & Data Science Pipelines

CLIENT

OTT AdTech Leader



CloudGeometry

OTT AdTech Leader

As a **leader in real-time video AdTech**, our client delivers integrated hi-speed audience selection with seamless video inventory delivery, for maximum reach – a channel known in the industry as OTT (over-the-top). Its real-time analytics and bidding management engine delivers precision-targeted video content sources from sources like YouTube, Hulu, and social media. The company provides its agency and global brand customers access to integrated feeds from over 150 ad exchanges and streams, processing 10 billion+ ad calls a day. The breadth and depth of its platform ensure global brands and agencies acquire can better, more profitable audiences faster.

The Challenge

For global brands, the complexity of accessing and analyzing video inventory can put high-value audiences out of reach. Managing the mix of online video audiences is a huge opportunity for an omnichannel ad strategy — provided it can be integrated with performance data in real-time. That requires responding to real-time bids within single-digit milliseconds and closing the analytics loop for ad buyers with the same near-zero latency.

On-demand data integration

[Amazon Redshift](#) handles continuous change across a massive range of data sources, for a full spectrum of analytics use cases.

Operationalize Machine Learning

Cut friction of transformation, leverage [AWS Sagemaker ML](#) to manage data flows and ongoing jobs for model building, training, and deployment.

Data Science Automation

Continuously assess data science roadmap, to provide a foundation both for data-driven innovation that is both agile & reliable.

OTT AdTech Leader

The Solution

Success in OTT video audience acquisition comes by getting the right viewer to see the right video ad at the right time – and have the viewer watch the video clip to completion. CloudGeometry provides [a closed loop data science pipeline architecture](#) that feeds the company's proprietary machine learning algorithms; for example; giving advertisers model-driven guidance for media campaign timing optimization.

Using the [Dataflow Integration Platform by CloudGeometry](#), built on an elastic microservices architecture, ensures a reliable, high-quality data ingest and enrichment. Given the massive stores of historic data required for accurate trending, CloudGeometry uses Redshift as a central place for all historic information, complemented by actionable analytic queries pushed to RDS. Data streaming is handled by [Kinesis](#). Finally, all end-to-end Data Pipeline resources are backed by CloudGeometry's [Data Engineering Operations](#) service, monitoring data quality and reliability 24x7x365.

The bottom line is OTT video delivery; CloudGeometry helped close the revenue loop with [AWS Lambda](#) to execute transcoding, so video inventory is always up to date with any form factors on any device where the video ad is viewed.

The Benefits

A comprehensive end-to-end data platform strategy from ingest to ML drives the leading edge of data-driven OTT video advertising audience acquisition.

On-demand data integration

[Amazon Redshift](#) handles continuous change across a massive range of data sources, for a full spectrum of analytics use cases.

Operationalize Machine Learning

Cut friction of transformation, leverage [AWS Sagemaker ML](#) to manage data flows and ongoing jobs for model building, training, and deployment.

Data Science Automation

Continuously assess data science roadmap, to provide a foundation both for data-driven innovation that is both agile & reliable.

Technology Solutions & Services

to build, optimize and run your cloud software and operations.



TECHNOLOGY SOLUTIONS

APPLICATION MODERNIZATION

Transform Legacy Systems
for Future-Ready Innovation

CLOUD COST MANAGEMENT

Optimize Cloud Spending
for Maximum ROI and Efficiency

AI & DATA

Achieve breakthrough automation and analytic
insights via cutting-edge data strategies

SECURITY AND COMPLIANCE

Reinforce your cloud infra, workload,
operations, and development end-to-end

FOUNDATION SERVICES

CLOUD INFRA & OPS

Robust Infrastructure Solutions for Seamless
Operations

- DevOps as a Service
- Managed Cloud Operations
- Cloud Spend Optimization
- Resilience, Continuity & Backup
- AWS Well-Architected

MODERNIZATION & MIGRATION

Smooth Transitions to Modern Architectures
with Minimal Disruption

- Application Modernization
- Kubernetes Adoption
- AWS Database Migration
- Data Engineering Operations
- Data Integration
- Data Migration
- Cloud Migration & Adoption

ADVANCED SERVICES

CLOUD-NATIVE DEVELOPMENT

Build Scalable, Resilient Applications with
Cloud-Native Technologies

- CI/CD
- Multi- Platform App Design & Development
- Cloud-Ready Teams
- Enterprise SaaS Modernization
- Multi-Tenancy SaaS
- B2B Customer Success Engineering

CLOUD-NATIVE OPERATIONS

Streamline Operations with Advanced
Cloud-Native Practices

- Platform Engineering
- Workload Management
- Monitoring & Observability
- Infrastructure Management

AI/ML & DATA SERVICES

AI/ML & DATA

Leverage Advanced Analytics and Machine
Learning to achieve exponential acceleration in
the ROI of your data assets

- AI/ML Engineering for Data Analytics
- Generative AI
- Traditional ML for Data Analytics
- AI/ML Development and and Data Science
- Data Engineering for MLOps


San Francisco


New York


London


Berlin
Prague


Cluj-Napoca
Montenegro


Tel Aviv

CloudGeometry delivers expert technical services, helping our clients unlock the full potential of cloud-native open source tooling and commercial platform technologies.

With roots in Silicon Valley, we've seen firsthand what works (and what doesn't). Count on CloudGeometry to accelerate application modernization, Kubernetes adoption, developer enablement, secure multi-tenancy, AI/MLOps, DevOps automation and more.

- As **AWS Advanced Consulting** partners, our certified solution architects and platform engineers help address the range of challenges facing enterprise innovators and venture funded startups alike.
- The **Cloud Native Computing Foundation** has accredited us as a **Kubernetes Certified Service Provider**.
- We serve as charter contributors to the **Linux Foundation Data & AI Commons** (LF Data & AI), supporting a diverse, sustainable ecosystem for open source data and AI technologies.

Over the last decade, we've built and deployed hundreds of big, fast full-stack apps with well-engineered cloud infrastructure across industries: Financial Services, Industrial Automation, Healthcare, AdTech, Consumer-grade Mobile, smart devices, and more.

From enterprise upgrades to data engineering to cloud-native scale-out, CloudGeometry helps you plot the shortest path across all dimensions of modern cloud software engineering.

 partner
network

Advanced
Consulting
Partner

SaaS

Amazon Kinesis

AWS Lambda

Amazon Redshift

AWS Database
Migration Service



CLOUD NATIVE
COMPUTING FOUNDATION

GENERAL MEMBER
LF AI & DATA
GENERATIVE AI COMMONS



Expert
Platform Engineering
& DevOps

[CloudGeometry.io](https://cloudgeometry.io)
+1 408 444-7061
info@cloudgeometry.io
github.com/cloudgeometry

Cloud Infrastructure
& Application
Modernization

100 S Murphy Ave #200
Sunnyvale, CA
94086 USA

AI & Machine Learning
Data Services

Open Source
Tooling & Integration



partner
network

Advanced
Consulting Partner

SaaS Architecture
Competency