

Case Study

AI-Powered Deal Health Score Engine for Programmatic Advertising Performance

Built for a US-based AdTech organization operating in CTV and programmatic space, to automate deal health scoring, surface anomalies in real time, and enable revenue protection before performance issues escalate.



PROJECT OVERVIEW

Programmatic advertising moves fast, but static rule-based systems couldn't keep up for one of our US-based AdTech clients operating across CTV, mobile, and programmatic channels, leading to delayed tracking, reactive monitoring, and heavy manual analysis. To address this, the client partnered with Rishabh Software to build an AI-driven deal performance platform with intelligent scoring and real-time alerts, reducing manual effort, improving efficiency, and enabling faster, proactive decision-making.



Capability

AI/ML Development
Services



Industry

AdTech



Country

United States

KEY FEATURES

The client was looking to unlock a smarter and more scalable way to monitor advertising (mobile, CTV) deal performance. To address this, we built a platform with the following key capabilities:

Intelligent Deal Health Scoring

We have implemented a normalized scoring framework that automatically evaluates the health of every active advertising deal on a 0–100 scale. Teams get a consistent and reliable way to measure performance and instantly identify deals that need attention, without manual review.

Added Explainable Diagnostics

Structured diagnostics that go beyond flagging an issue, explaining why a deal is underperforming and what is driving the score. This gives teams the context they need to make informed decisions quickly, rather than spending time investigating the root cause themselves.

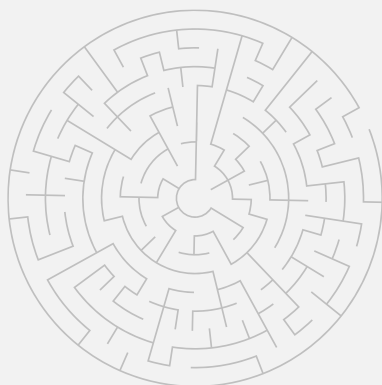
Segmentation-Aware Benchmarking

We introduced segmentation-aware benchmarking to provide better performance context across deal types, traffic sources, and campaign conditions. This helped the client compare deal performance more accurately instead of relying on generic thresholds.

Real-Time Anomaly Detection

Implemented the capability to continuously monitor performance in real time across key bid lifecycle stages including Requests, Bids, Wins, Impressions, and Spend and flag unusual patterns early, helping teams quickly identify and act on underperforming deals.

CHALLENGES



- Manual, SME-driven deal analysis with no automated scoring pipeline made performance monitoring resource-intensive, inconsistent, and difficult to scale.
- No normalized metric (0–100) to quantify deal performance consistently across inventory.
- Benchmarking was not segmented by deal type, supply source, or campaign condition, making it hard to contextualize performance accurately.
- No real-time anomaly detection across the bid funnel meant issues across key stages of the bidding cycle were often caught too late.
- Without structured root cause diagnostics, teams had limited ability to understand why a deal was underperforming and act on it quickly.

SOLUTION

Our approach was to replace manual, SME-driven deal monitoring with an intelligent and scalable performance evaluation framework, combining a unique blend of execution, strategy, and engineering. Here is how we built it:

Built an Intelligent Deal Scoring Engine

We developed a scoring system that automatically evaluates every active deal using a normalized 0–100 health score. Using Python-based data processing and Vertex AI, the system continuously analyzes performance signals and highlights which deals need attention reducing manual effort and improving consistency.

Enabled Proactive Monitoring Across the Bid Lifecycle

Monitoring was structured across every stage of the bid lifecycle, requests, bids, wins, impressions, and spend, using orchestrated workflows built on Apache Airflow and Cloud Composer. Rather than waiting for issues to surface, teams now have visibility into exactly where performance is dropping and can intervene before it impacts revenue.

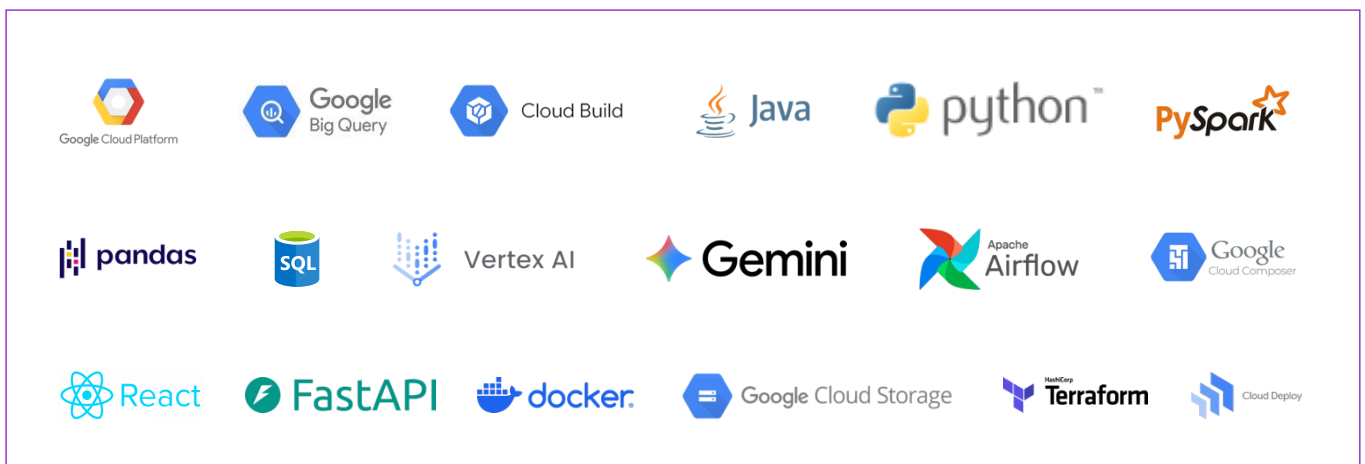
Unified Data Across Multiple Sources

Performance data from multiple sources was consolidated into a single, structured data layer using BigQuery and GCP-based pipelines orchestrated via Apache Airflow. This eliminated data inconsistencies and established a reliable foundation for accurate, consistent deal performance evaluation across the entire ecosystem.

Introduced Real-Time Detection and Explainable Insights

We implemented real-time detection logic combined with event correlation techniques and AI-driven insights (Vertex AI) to identify unusual patterns as they happen. Clear, human-readable explanations helped teams understand issues faster and take corrective action.

TECHNOLOGIES & TOOLS



Outcomes

50%

Reduction in manual deal review effort

100%

Coverage of Active Deals

30%

Reduction in revenue leakage

ABOUT RISHABH SOFTWARE

As a Digital Engineering and Enterprise Transformation leader, we empower businesses to scale, innovate, and thrive in today's digital-first world through technology rooted in trust and transparency. We leverage emerging capabilities such as Cloud, Data Engineering & Analytics, AI, Automation and Application Engineering to drive digital transformation and unlock new opportunities. We have successfully served across 25+ countries, and we work towards customer delight as "WE CARE."

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