Using data to disrupt the music industry

switchboard

Streaming service providers are disrupting the music industry. Through continued innovation and savvy user acquisition, this particular service provider is the pioneer of audio streaming services for today's digital listeners.

The company is experiencing sustained growth. In addition to its 100M+ paid subscribers, its premium advertising business with ~150M ad-supported listeners exceeds $500M annually. Its podcast business has become a heavily monetized platform boasting the highest number of audio-streams worldwide. A global growth marketing effort helps to drive these revenue engines.

Data drives growth

Data plays an important role in the company's success. To drive sales strategies and marketing campaigns, business teams need to consolidate hundreds of data streams from across dozens of partners – accurately, transparently, and on a global scale. The company's word-class Engineering team are accomplished at big data initiatives and building bespoke systems for the business teams, including Revenue Operations and Marketing.

These teams relied on a mix of legacy custom code and a legacy vendor solution to aggregate and normalize data from dozens of third-party and internal data sources:

- SSPs (Supply Side Platforms)
- Ad servers and audience demographics
- 100s of Marketing channels - Google, Facebook, Twitter, Snapchat, and agency feeds

Keeping this custom code updated and running reliably placed an unsustainable burden on Engineering. They necessarily had to be focused on creating technology that supports the company's core IP, which meant they could no longer support the custom code, much less contemplate the expanding workload to manage the growing influx of data.

Growth brings data challenges

The company needed to solve several data challenges simultaneously:

Expanding partner ecosystem: The addition of each new marketing partner and SSP resulted in a more complex and ever-growing ecosystem with each pipeline requiring continuous monitoring and updating.

Domain expertise: Each partner feed had its own schema and semantics. Sensitive data such as revenue or spend needed to be transformed in particular ways for KPIs to be calculated accurately.

Data quality: Daily forecasting meant that data had to be pulled, and often backfilled, correctly before presenting reports to key stakeholders. Day-to-day changes in data formats and from API glitches required quick intervention from Engineering.

Data governance: Using revenue and delivery data in more parts of the business meant that data governance, such as provenance and consistent application of business rules, became critical.

The company had attempted to use several well-known Revenue Operations and Marketing solutions. However, these systems only provided aggregated data, and did not integrate effectively with their BigQuery Data warehouse. Plus silent data failures meant that business teams could not trust the data for reliable measurement and forecasting.

Solution: a unified strategic data asset

The objective was to automate and make bulletproof the entire data operations process, and put it into **the hands of business owners**. Partnering with Switchboard, it took the company less than **two months** to implement an enterprise-scale data operations solution. A **no-code** environment based on reusable "data recipes" allowed individual business teams to transparently model and iterate on their own business rules, while a battle-hardened hosted platform did the heavy lifting of scaling, monitoring, alerting and logging operational processes. Switchboard's Customer Success team provided expert data science knowledge and hands-on operational assistance.

1000%
increase in data under management

300%
increase in new partner integrations directly controlled by the business team

0%
increase in headcount

"If we hadn't started working with Switchboard, given competing priorities we would still be trying to fill the engineering resource gap today. We're really impressed. We had previously invested over eight months of engineering to overcome a data challenge that took Switchboard one month to solve."

– LEADER OF FINANCIAL SYSTEMS GROUP

The company estimates it would have taken internal engineering resources an additional **eight to nine months** to staff and acquire the specific domain expertise needed to pull together the required data stream – not to mention ongoing headcount to manage day-to-day operations and ensure data integrity across the partner ecosystem.

Key business deliverables Switchboard enabled include:

Podcast ad revenue report – joining on-platform revenue and ad server data with podcasting hosting technology platforms – was onboarded and fully actionable within days.

Free player ad revenue report – aggregating impression-level SSP and ad server data from Google DFP – was onboarded within weeks.

Global marketing measurement and spend report – joining over 250 individual top- and mid-funnel marketing feeds and embedding extensive business rules – was activated in less than 60 days.

Revenue Operations and Marketing teams can use data to proactively grow the business. The company now has a **unified strategic data asset**, merged from hundreds of disparate sources. By partnering with Switchboard, business teams are now able to:

- Pull the freshest data **in real-time** and maintain consistently high-quality datasets to present to the C-Suite and other stakeholders
- Model data using their own **business rules** and embed them into a single, change-controlled, source of truth
- Fully integrate with **existing engineering systems** including data warehouses and archival data lakes
- Quickly recowver following any partner outage or schema change, by rapidly identifying the source of the glitch and automatically **backfilling with accurate data**
- Add or change Revenue Operations and Marketing partners with **no disruption** to the business

Using Switchboard's enterprise-grade SaaS platform and industry-leading domain expertise, the key business stakeholders are no longer simply consumers of data. Instead, they are continuously performing active analysis and sharing insight with other parts of the business. And Engineering can focus fully on core company IP without ongoing support requirements from the business teams.

Serving enterprise-wide dataops

Now the company has identified opportunities to unify data across internal systems, including Sales, ERP, and Accounting. Their joint vision is to dramatically accelerate business decision-making by enabling individual teams to access one central source of truth and independently perform impactful analytics that are simultaneously more granular and agile.

Behind the company's disruption of the audio streaming industry lies talented teams with ambitious plans for the future. With Switchboard, they're able to strike the right chord with ad partners, artists and music lovers across the globe more than ever before.

About Switchboard

Switchboard enables enterprise business teams to be data-driven. From the team that launched Google BigQuery, Switchboard's ready-made data unification platform turns disparate data into a single source of reliable, trustworthy information. Business stakeholders at Meredith, Pearson, Spotify, and others get a strategic data asset for customer insights and revenue operations, while their technical teams retain control without the burden of day-to-day operations. Be Data Strong with Switchboard.