VICE Leverages Switchboard to Automate and Accelerate Analytics Across $5 Billion Global Digital Publishing Network

Big Data Drives Big Decisions — Aggregating Disparate Data Sources for Rapid Analysis and Decision Making

HIGHLIGHTS

• Using Switchboard’s cloud-based service, VICE accelerated the company’s most complex big-data initiative by 6-9 months against internal company estimates for a DIY solution

• VICE saved an estimated 9,000 person-hours by adopting Switchboard’s automation and data preparation platform, allowing key developer resources to remained focused on the company’s content network

• VICE empowered business leaders with real-time decision making based on cross-platform reports, with results powered by Google BigQuery

• VICE enabled turnkey event-level analytics using Switchboard to automatically handle 50TB annual ad and bidding logs without any IT overhead

CHALLENGE

A pioneering digital publishing organization, VICE operates the world’s premier original online video and lifestyle destination. With an international network of digital channels, the VICELAND television network, a television production studio, a magazine, a record label, an in-house creative services agency, and more—VICE is truly a world-wide media and data phenomenon.

With surging global growth pushing the company’s most recent valuation to more than $5 Billion, VICE is one of the most comprehensive and complex digital publishing platforms in the world.

However, the explosive global growth of VICE created three significant data challenges:

1. Scale: With a global presence in over 30 countries creating volumes of heterogeneous siloed data, and a sharp rise in the use of programmatic ad buying and selling, there was too much data from different sources to efficiently manage and prepare for an up-to-date, strategic view of business performance.

2. Speed-to-Market: With data velocity reaching rates as high as to 50GB/day, and with complex APIs and schemas, a single data
source such as DFP Data Transfer could take full time data engineers months just to understand and automate.

3. **Timely Insights**: data for manual reports took so much effort to massage and prepare that any insights were arriving too late to impact business performance.

“We wanted to leverage Google BigQuery to analyze sophisticated variables closer to real-time, and eliminate manual data aggregation and reporting,” said Andrew Smith, VP of Digital at VICE. “To build a system that could scale and automate content performance analysis plus audience and advertising campaigns across more than 30 countries was a big data challenge that required serious Google BigQuery expertise.”

VICE estimated it would take between 6-9 months to build a system that unified and prepared data from DoubleClick for Publishers (DFP), programmatic Ad Exchange and YouTube performance logs. In addition to development time, VICE also knew valuable IT resources would be consumed maintaining heterogeneous APIs and bespoke automation after the internal system was completed, which is why Andrew contacted big data experts at Google, who introduced them to Switchboard.

“After meeting the Switchboard team, we were convinced they could help us to manage our use of Google BigQuery, data visualization software, and other tools to create a system that lets us hyper-target advertising based on data that we simply couldn’t access fast enough with our current system,” said Amanda Yang, Data Scientist at VICE. “With 30 plus offices across the world, delivering fine-grained analysis as close to real-time as possible for variables like inventory, project revenue, and ad campaign success would provide significant value for the business units we support in IT – but building it in house would be a massive project.”

Real-time business summary by Switchboard & BigQuery.
SOLUTION

The VICE/Switchboard pilot launched in less than two weeks – allowing VICE to quickly go live with DFP automation as other functionality such as inventory reports and revenue insights were completed in less than two months. Switchboard will also provide the analytics foundation to support VICE as it expands or deepens operations with 3rd party platforms like Facebook, Snapchat or the company’s new TV stations in the U.S. and Canada.

“VICE is an ideal customer for Switchboard because they have an aggressive goal to unify up-to-the-minute data from many different sources,” said Ju-Kay Kwok, CEO of Switchboard. “After launching Google BigQuery, we saw many analytically-savvy teams get bogged down by operational aspects of unifying big data sources, which is what inspired us to create Switchboard - the first fully-hosted data platform that simplifies data preparation to help analytics experts avoid big data plumbing and instead focus on using data to drive critical business decisions.”

An additional benefit was utilizing Switchboard’s out-of-the-box connections to complex data, such as DFP, DBM, AdX, YouTube, and non-Google data including Facebook and Operative order management.

“Things like APIs, schema, and data sizes for DFP and YouTube make understanding the performance of content and inventory across dozens of global properties and partners really complex,” added Amanda. “Onboarding data from these types of sources would be a huge technical challenge – which is why the Switchboard solution is great, because they were able to start automating our production data in less than a week.”

RESULTS

1. Scale: VICE now relies on Switchboard as a singular big data platform to consolidate disparate data regarding content performance, inventory sell-through, and revenue performance in order to analyze it as a whole. With Switchboard managing large flows of critical data and preparing it for analysis, the VICE analytics team can “slice and dice” by a wide range of variables, including country, region, vertical brand, device, down to individual days or audience segments. Centralized data and self-service dashboards also empower VICE regional teams to make their own data-driven business decisions.

“At a technical level, we found Switchboard to be the most reliable end-to-end solution to automate the use of big data with live dashboards without creating maintenance headaches or latency issues,” added Amanda. “Since we rely heavily on Google BigQuery, Switchboard also helped us save time and money by normalizing data from highly disparate sources which allowed increase our use of Google BigQuery to 50TB annually without any IT overhead.”

“To build a system that could scale and automate content performance analysis plus audience and advertising campaigns across more than 30 countries was a big data challenge that required serious Google BigQuery expertise.”

Andrew Smith, VP of Digital @ Vice

Audit-ready history of business-critical data.
2. Speed-to-Market: Switchboard is also VICE’s go-to solution for unifying disparate data sources into a single cloud data warehouse, backed by Google BigQuery. Installed in less than two weeks, Switchboard for DFP alone saved VICE 2,400 hours of internal development resources while accelerating product availability by 6-9 months based on internal company estimates. With Switchboard accelerating time-to-analysis, VICE was able to reduce the time lag for critical executive reports from two people spending 4 weeks to a single person spending an hour or less.

“Switchboard removes complexity from big data management by auto-scaling data preparation and transformation in the cloud, which is why we could productionize scalable data operations for a global publishing giant like VICE in just a few weeks,” said Ju-kay. “Big data can help publishers like VICE to gain timely insights into digital content performance, and choose strategies that enable them to optimize the pricing and sell-through of their ad inventory. This in turn drives greater organic traffic and revenue success.”

3. Timely Insights: “When we think about how our use of big data at VICE will evolve, we foresee using Switchboard to analyze user preferences on next-generation content types such as VR data and other rich media as digital publishing continues to change,” said Andrew. “The more we can use big data with Switchboard from reporting in hours versus days, and eventually seconds versus hours – the closer VICE gets to our vision of providing an unmatched information experience for our customers.”

Switchboard operations dashboard. Real-time visibility into data health.

About Switchboard
Switchboard eliminates the need to navigate a complex chain of legacy BI and ETL tools, and the need to invest in massive infrastructure by delivering real-time visibility and operational maturity on top of the latest data management technologies. This approach frees IT and Dev resources to focus on achieving business goals. Early customers in advertising, gaming and retail rely on Switchboard because the company’s agile self-service platform empowers analytics teams to focus on what they do best—driving business performance.

About Google Cloud
Google Cloud Platform lets you focus on what’s next for your business. Google Cloud Platform frees you from the overhead of managing infrastructure, provisioning servers and configuring networks. To let innovators innovate and let coders, well, just code.