

CASE STUDY

Simulmedia: Performance Advertising at Scale

**Highlights:**

- Processes 300 million viewing events daily from over 20 sources
- Accelerates report production from one hour to milliseconds
- Identifies new opportunities for clients to optimize ad spend
- Increases team collaboration and meeting productivity through Immerse

“The data challenges in the TV industry are significant.”

— **David Billingham, VP of Engineering**

TV Advertising Analytics: Enriching Client Results and Relationships

Simulmedia is a pioneer in the audience-based, advanced TV advertising industry. The company was founded in 2008 by individuals with backgrounds in digital advertising technology. Its goal was to improve the effectiveness and efficiency of TV advertising in an increasingly fragmented media landscape.

Simulmedia has always favored a tech-first approach to advertising to address its familiar data challenges. “The data challenges in the TV industry are significant,” claims David Billingham, VP, Engineering, at Simulmedia. “Digital advertising has a real-time aspect to it, whereas in TV advertising, companies must process large amounts of data and forecast it out.”

Simulmedia processes over 300 million viewing events per day, aggregated across over 20 different sources. These events are stored in a data warehouse, and used to generate insights into the scheduled, or linear, TV ecosystem. The company adopted spreadsheet-based analytics applications and tools to visualize its data. Yet as the company ingested more viewing events from different sources, these solutions couldn’t handle the influx of data, and the time to insight grew.

To complicate the problem, Simulmedia’s operations team had to manually define and prepare each report for its clients, which included major national advertisers across the CPG, hospitality, financial services, telecom, and pharmaceutical industries.

These reports were a significant lift for the engineering team to set up, test, and iterate until maturity. Reporting limitations constrained the ability of national advertisers to see the effectiveness of their ad campaigns and spend, or to drill-down into specific insights.

Finally, this problem also limited Simulmedia's ability to make informed recommendations during client conversations, and to properly prepare for meetings with potential clients.

Simulmedia wanted an analytics platform to show its clients how well their campaigns were performing, at every step of execution.

High Performance Data Exploration

Simulmedia began looking at high performance computing (HPC) solutions to address its challenges of scale and speed to insight. The company soon found its answer in the GPU processing power of OmniSci.

"To see how OmniSci was defining a new columnar-based database that executed on top-of-the-line NVIDIA hardware, for the benefit of data exploration, that was wildly exciting," explains Kyle Hubert, CTO at Simulmedia.

"We adopted OmniSci because it was pushing the boundaries of what's possible with technology. Also, because it dispensed with the sheet-based paradigm and gave us a dashboard that was very intuitive and easy for business users."

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Growing Adoption and Improved Customer Service

Simulmedia's first use case with OmniSci was exploration of all ad spots executing on national television. Prior to OmniSci, it took 30 minutes of operational set-up time and 10 minutes of computation for each report. "With OmniSci Immerse, we achieved a total picture of all television advertising spend in milliseconds, with virtually no setup time save the one time dashboard creation cost," says Kyle.

Internally, this allowed Simulmedia users to better visualize and understand the effect of national television advertising. "Our adoption of OmniSci exposed our data to our internal users. This allowed for our sales and account management team to be more informed about the television marketplace," claims David. "It's like a breath of fresh air. You can just look at all your data and see it in a way that wasn't available before," Kyle adds.

Simulmedia's sales team was soon using OmniSci Immerse to woo prospective clients with rapid national TV advertising performance results, showing them new opportunities for revenue growth. Immerse's intuitive user interface allowed Simulmedia customers to drill-down into specifics to find the anomalies affecting prospective clients' performance, or to highlight trends.

Simulmedia scaled its usage of OmniSci to cache data for real-time use, in order to build out applications for its business users. Among the applications powered by OmniSci is Simulmedia's premiere predictive, planning, analytics, and execution platform known as VAMOS (Video Advertising Marketing Operating System). VAMOS is designed to make TV advertising more efficient by increasing a brand's target-audience reach and reducing wasted impressions. It then measures an audience's responses at the spot level to establish the effectiveness of a campaign and inform future optimization.

VAMOS' interactivity and speed allow advertisers to dig deeply into the performance results of all ad spots on a national level, accelerating the time to insight across all viewing behavior. "Speed is the central feature of VAMOS. It allows users to interact and engage with the data as quickly as possible," claims David. "OmniSci is a core component of VAMOS, which allows users to quickly, in real-time, explore linear TV data."

Beyond VAMOS, Simulmedia is also using OmniSci to accelerate machine learning around viewing behaviors. "We use machine learning to predict viewing behavior for ad placement. OmniSci allows us to look into those predictions and find areas of improvement that we can offer better service," adds Kyle.

Setting the Standard for Television Advertising Analytics

With the help of OmniSci, Simulmedia improves the predictability and performance of linear television advertising. VAMOS has given time back to the engineering and tech teams. This frees them to focus

on improving other applications and general workflow. These teams are now looking for additional places to integrate OmniSci into Simulmedia's data ecosystem.

Meanwhile, Simulmedia's clients appreciate the self-service platform for its interactive, real-time visualization analytics. This gives clients unparalleled insights into the performance of their ad spend and fosters confidence in the value of their relationship with Simulmedia. With corporate clients able to run ad-hoc queries for the most timely questions, Simulmedia focuses more time pursuing deeper insights aimed at optimizing media plans and spend for those same clients.

Unexpectedly, Simulmedia found that OmniSci enabled greater interactivity and collaboration in its team meetings. Instead of PowerPoint, internal teams huddle around the Immerse dashboard, analyzing viewing behaviors and trends, and identifying insights together. Mixed teams of local and remote employees now collaborate over very large datasets in real-time, which expedites the development cycle of client ad plans, and fosters greater cross-team communication.

Simulmedia has changed an industry that has been traditionally slow to react. Advertisers now reach out to Simulmedia within 24 hours of launching national TV campaigns, and the company can answer their questions within just a few hours of the close of the broadcast day. That gives Simulmedia an important advantage in its competitive industry.

"We use machine learning to predict viewing behavior for ad placement."

— Kyle Hubert, CTO

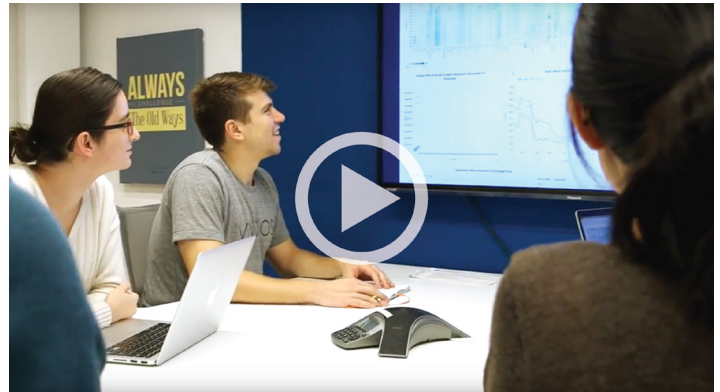
About Simulmedia

Simulmedia is a pioneer in the audience-based, advanced TV advertising industry. The company makes TV advertising more efficient by helping brands reach more of their target audience and measuring their responses on a spot level to demonstrate a campaign's effectiveness and inform future optimization.

Learn More

To learn more about Simulmedia, visit <https://www.simulmedia.com>

Watch our video on: OmniSci Lowers the Cost of Curiosity in Advertising Analytics at Simulmedia



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