

SoundCommerce Powers Retail Decisions With Real-Time Data

SoundCommerce, founded in 2018 by veterans of Amazon.com, provides an out-of-the-box data platform for retail brands from global chains to local small businesses to help brands better forecast and manage inventory while providing the most seamless customer experience. Built upon years of retail, eCommerce, and analytics experience, the SoundCommerce platform is designed to collect data from any source and build a model around the metrics and relationships that are most crucial to retail. This includes everything from trend forecasting, inventory control, marketing strategy, and customer experience.

With retail companies under increasing pressure to offer the best — meaning fast, seamless, hyper-personal, and memorable — customer experience, understanding customers and supply chain is more business critical than ever. While this can make or break a company's success, retail companies of all sizes struggle to access and take action on the data they need to efficiently and effectively deliver above and beyond the competition.

SoundCommerce's retail data platform aims to solve the technical burden for retailers and provide them with out-of-the-box, actionable insights. To do this, SoundCommerce needed to build a platform that meets the needs of retailers at varying stages of digital transformation — from those with a strong online and eCommerce presence to others with decades of brick and mortar history.

After testing multiple products, the SoundCommerce team chose to build their data platform on Google Cloud Platform, BigQuery and Looker. This provides a robust base platform while still providing flexibility for clients to choose their own tools as needed.

Key Takeaways

- Saved hundreds of manual reporting hours each month and reduced platform licensing costs by almost 75%
- Increased overall engineering throughput by at least 50%
- Built a turnkey data and decisioning platform for consumer-direct retail companies, powered by Google Cloud BigQuery and Looker
- Offered SoundCommerce customers a way to leverage data for marketing, merchandising, inventory, supply chain, customer experience, and more without the need to build and maintain a custom data warehouse
- Provided SoundCommerce customers a methodology to shift ad spend, inventory and resources as they adjust to an accelerated change from brick and mortar to eCommerce

Engineering Demands and Commercial Scale Led SoundCommerce to Reconsider Cloud Services

In building a commercial data platform for retailers, SoundCommerce considered two core requirements. First, they needed to empower customers to understand key business metrics, and to make data-

driven decisions to drive those metrics. Second, they needed a data infrastructure that is easy to customize, scale, and maintain as their customer base and use case complexity expand.

SoundCommerce originally built their platform prototype on another cloud provider. Once they launched and started working with customers, they realized this previous solution put too much administrative burden on their technical team for creating, maintaining, and customizing a shared and responsive data model, and a growing library of reports and visualizations. The prior stack lacked the power and features that consumer brands and retailers need to make fast decisions at scale. In addition to product challenges, the SoundCommerce product team worried about the risk of potential vendor lock-in down the road — both for their commercial product and for their customers' data.

The SoundCommerce team knew that brands and retailers need more than access to spreadsheets and basic visualizations in order to truly understand their businesses and make data-driven decisions. Customers need analytics and actionable data through direct query and data orchestrations to native systems and tools already in use. The prior solution limited customers' options for drilling into and exploring SoundCommerce data models.

Previously tested cloud and BI tools made it impossible for the SoundCommerce team to scale shared models and dashboards across customers. Every attempt to abstract the data model and report suite for more clients required manual application of specific changes — work that involved days of engineering effort. This made scaling costly and slow, consuming resources as well as delaying time-to-value for customers.

When connecting their previous BI tool live to their data warehouse, SoundCommerce found they lost key modeling capabilities — making data processing and governance an ongoing resource burden for their team. There was no scalable or collaborative engineering workflow and there was no way to leverage code and data versioning. With only three data analysts on staff in the early days at SoundCommerce, one analyst's entire job was maintaining reports rather than conducting strategic analysis to extend the commercial platform.

It was time to explore new solutions. When evaluating cloud services, SoundCommerce focused on establishing a collaborative engineering workflow to enable the team to perform parallel data engineering against a common environment and model, ensuring higher throughput, quality and time-to-market for customers. SoundCommerce also wanted a modern analytics platform that had a robust offering for embedded analytics, making it easy to customize and scale real-time insights for their customers.

Finally, SoundCommerce knew requirements would evolve over time and that maintaining flexibility for integrations and customer use cases are critical to long term success. SoundCommerce wanted to account for customer requirements today as well as for the future. Building on an open, multi-cloud platform was critical to this strategy.

Choosing a Flexible Cloud Data Infrastructure for SoundCommerce

SoundCommerce's criteria led them to select Google Cloud Platform, BigQuery and Looker as core components of their data platform.

"Google Cloud Platform [GCP] really stood out in terms of being low maintenance and being able to sensibly pull things together. From an administrative perspective, it was so easy," shared Jared Stiff, CTO at SoundCommerce.

Specifically, SoundCommerce chose BigQuery because it saves engineering and infrastructure resources leading to a lower administrative burden. The engineering team loves the innovative features and mindset of Google, and with open standards and services there is less worry about vendor lock-in. It was also critical that GCP provides customers with the most flexibility down the road to continue to use their preferred applications.

"There was an openness and flexibility of GCP that was very attractive, there was no sense of lock-in," adds Stiff.

Eric Best, CEO at SoundCommerce explains, "Because of the way BigQuery and Looker interact, we have flexibility in terms of where we decide those data definitions and calculated values run. We have the flexibility to standardize things in BigQuery in a way that provides consistency in Looker reports."

In addition to native integrations with BigQuery and native applications that ensure a flexible future, the SoundCommerce team chose Looker for its embedded analytics offering, Powered by Looker, which makes it easy for their customers to create new and update existing reports directly within the SoundCommerce platform.

"We were very excited about how Looker enables us to incorporate the BI components of our application into an engineering workflow ... we're not constrained," shares Stiff. Finally, Looker's Git-versioned modeling layer, LookML, provides the SoundCommerce team with the collaborative yet governed approach they need to provide trusted metrics for customers at scale.

With the help of systems integrator Bytecode IO, the SoundCommerce data engineers were able to migrate their complete set of embedded reports to Looker in less than two months.

Since adopting Looker alongside Google Cloud Platform and BigQuery, SoundCommerce estimates saving hundreds of hours per month that were previously spent developing new reports. They have also reduced real platform licensing costs by almost 75%, representing more than ten thousand dollars per month. These savings are expected to grow as the SoundCommerce business and platform scale.

"We had video calls with a sales engineer every week — they were there to answer every question," shares Aharon. "They not only helped us with migrating, they also helped us do things better than before — things like how to make more data available and accessible, how to make it more user-friendly, and how to build dashboards in a better way."

Using Data to Deliver Customer Value

Today, SoundCommerce delivers robust and real-time insights to their customers. With these insights consumer brands and retailers can monitor and focus on three key concepts, which SoundCommerce believes are essential for retail success:

- A focus on real-time commerce operations as a driver of **Customer Experience**
- Close tracking of granular **Unit Economics** — the detailed revenue and profit profile for every order — to enable quick and precise decision-making about pricing and operational optimizations.
- **Customer Lifetime Value (CLV)** that includes variable costs and contribution margins of a customer relationship, to accurately track and grow CLV over time.

"If you can accurately track and grow contribution margin per shopper over time, you have a more powerful measure of the total value of your brand," adds Best.

By monitoring these key areas, SoundCommerce helps retail companies understand and optimize their inventory, exceed customer expectations, and ultimately create "super fans."

Optimizing Inventory with Data

Both traditional brick and mortar and digital-first retailers have experienced challenges due to the accelerated shift towards eCommerce. By having instant and granular visibility into how inventory — down to the size, color, and location of an item — relates to sales velocity, order profitability, and shopper value, the SoundCommerce platform helps retailers make the best decisions for their customers and their bottom line.

For example, one global brick and mortar retailer who was no longer able to operate their store locations due to COVID-19 used the data to identify regional trends as the eCommerce portion of their business quickly moved from the secondary to primary source of revenue. With these insights, they were able to move inventory to the optimal storefronts, which were repurposed to operate as regional fulfillment centers for online orders. This helped the retail company reduce its spend for warehouse space, make use of its shuttered storefronts, and bring the most relevant inventory closer to interested customers. This sped up their customers' purchase process by making goods available in a fraction of the time — reducing shipping time, making curb-side pick up faster, and ensuring that appropriate inventory was readily available for exchanges.

Clothing brand Richer Poorer experienced a shift in retail channel mix from 70% wholesale/30% eCommerce to more than 75% eCommerce in a matter of months. Shifting overnight from a decade of primarily wholesale operations to digital-first commerce was a big adjustment. Luckily, Richer Poorer already had the technical foundation in place with SoundCommerce so they could quickly track, shift, and scale their business.

Among their more creative tactics, Richer Poorer connected with retail partners who had just received seasonal inventory and coordinated return of the goods, making them available as eCommerce inventory. This helped channel partners adjust to market shifts while ensuring Richer Poorer met increased eCommerce demand. Another change they made was repurposing assortment from previous collections. This allowed them to offer enough products online, introduce additional colors, and bring back some fan favorites.

Exceeding Customer Expectations

As more purchases are made online and shopper expectations for service levels rise, it's critical for retailers to know exactly when a product will arrive — and to set a speedy and realistic expectation for the customer. Prior to using SoundCommerce, many of their consumer brand customers did not have the visibility to discover trends in the shipping processes, improve order efficiency, and ensure they were meeting the delivery expectations set for customers upon purchase confirmation.

One of the key data models included in the SoundCommerce platform tracks order status by fulfillment date across eCommerce, point of sale, ERP, warehouse management, and parcel post carrier systems. The Looker dashboard allows operations teams to manage orders by shipping latency, shopper doorstep delivery latency, and how fulfillment performance compares to previous time periods, and more. With this data instantly updated and readily available, retailers can make sure they're delivering promised customer experiences.

With access to insights around customer lifetime value (CLV) and order status, warehouse operations teams can use this complete view of the customer to prioritize their actions. For example, they can prioritize any first time order and high value loyal customer orders for expedited fulfillment and shipping. This helps retailers make a great first impression and continue to deliver and exceed the expectations of their most valuable customers.

Creating Super Fans

A focus on tracking to meet, and exceed, customer expectations helps retail companies using the SoundCommerce platform to create "super fans," as one retail customer describes them.

For example, one fashion brand utilizes a 'drop model,' where they release new designs regularly to their customer base. One of the things that makes this drop model effective is that there is real scarcity as well as a perceived scarcity. For the model to work, it's critical to accurately forecast demand, produce the right amount of product, and satisfy customers while retaining the feel of shopper exclusivity. This delicate balance requires accurate historical and real-time insights.

Another SoundCommerce customer has shared how these data-driven practices have resulted in higher average orders and customer lifetime value, and in increased ROI on marketing spend.

"We are seeing our return on ad spend at 400% at the order level and at almost 700% at the unique customer level ... We're a small brand with limited resources, and having access to visual data has been incredibly helpful for us," explained the apparel brand president regarding SoundCommerce.

Powering Retail Decision-Making With Data

Since adding Google Cloud BigQuery and Looker to their technical stack, the SoundCommerce team has saved data engineering hours previously spent on manual reporting, reduced their platform licensing costs by almost 75%, and increased their overall engineering throughput by 50%. Additionally, retail customers benefit from real-time insights and the continuous platform upgrades, which allow them to proactively discover trends and plan for market changes.

SoundCommerce expects to continue to expand the ways in which Looker is used to present and visualize data within SoundCommerce user interfaces. Further, the company intends to embed more of Looker's explorer and developer features to enable customer self-service use cases that leverage the SoundCommerce data graph and data model.

"We're moving way faster today than we were able to before. Our customers and client team internally keep saying 'this is the fastest we've ever been able to execute on our plan and KPIs,'" shares Best.