Interweaving SAP and Google BigQuery

A luxury retailer uses near real-time data to improve customer service and grow market share
“With Qlik Data Integration automating the flow of data from SAP and various other systems into BigQuery, we’re confidently able to respond to market changes with the timely data we need for good business decisions.”

Matthias Krenzel, Head of Data Platform Services, Breuninger

**Complicated access to vital SAP data**

Founded in Germany in 1881, the luxury department store Breuninger is one of Germany’s most successful fashion and lifestyle businesses. With 5,500 employees, it offers 1,200 brands across 13 department stores in Germany and Luxembourg and an online storefront in Austria, Germany and Switzerland.

Breuninger’s primary aim is to preserve and expand its market share by delivering excellent customer service. However, identifying customer needs and acting quickly with marketing campaigns relies on gaining real-time access to large amounts of data tied up in its SAP systems. The data access was problematic because traditional Extract, Transform, Load (ETL) processes require a lot of labor-intensive manual scripting and are prone to human error. Inaccurate and untrusted data is delivered when engineers add new data sources to brittle ETL pipelines.

Breuninger’s fragmented technology stack further complicated access to vital data, with many silos such as CRM, ERP, billing, inventory and POS, all with their sources and requirements.

“SAP holds data on many corporate functions and also our 60-year-old Breuninger Card – a loyalty program built around an SAP sub-module,” says Matthias Krenzel, Head of Data Platform Services, Breuninger.

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**Solution Overview**

<table>
<thead>
<tr>
<th>Customer Name</th>
<th>Breuninger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry</td>
<td>Retail and Services</td>
</tr>
<tr>
<td>Geography</td>
<td>Stuttgart, Germany</td>
</tr>
<tr>
<td>Function</td>
<td>Customer Intelligence, New Business Opportunities, Reimagined Processes</td>
</tr>
<tr>
<td>Business Value Driver</td>
<td>Marketing, Sales, Supply Chain Management</td>
</tr>
</tbody>
</table>

**Challenges**

- Deliver excellent customer service; protect and grow market share
- Gain quicker access to near real-time data
- Combine data into reports that support better decisions

**Solution**

Breuninger chose Google Cloud BigQuery for quick access to data for analysis. It transfers the data from SAP to BigQuery using Qlik Replicate.

**Results**

- Access to reports streamlines decision-making
- Continuous near real-time data allows business to respond to market changes
- System maintenance is minimal and the company reduces reliance on external SAP contractors
“One of our unique challenges was to get that data out of SAP faster because our CRM team needs close to real-time data to drive its campaigns. The key was how quickly after purchase we could enable customers to share their insights on what they had just bought, and that meant getting the data out of SAP as fast as possible.”

Quicker data pipeline builds
Breuninger decided to use BigQuery, Google Cloud’s fully managed enterprise data warehouse. BigQuery’s data security features make it ideal for the sensitive datasets held in SAP systems; it can accommodate both SAP and non-SAP data and easily integrates with SAP.

The missing component for near real-time data access was a tool to transfer data from SAP to BigQuery efficiently. Already a satisfied user of Qlik analytics software, Breuninger chose the open, end-to-end Qlik Data Integration platform featuring Qlik Replicate.

“Having our warehouse based on BigQuery, we wanted tight integration with the existing stack,” adds Matthias. “We did not want to start from scratch and needed a solution that would leave us free to concentrate on our core competency of serving the customer.”

For a proof of concept (POC), Breuninger set up SAP as the data source, and the initial target was a PostgreSQL database in Google Cloud and from there on to BigQuery. In the POC Qlik’s engineers set up the pipelines in just a few hours, and the POC revealed that data delivery was as near real-time as possible. Qlik Replicate allows Breuninger to integrate SAP data with other data from various sources across the company then consolidate it all in BigQuery.

Near real-time data for sound decisions
Continuous end-to-end availability of analysis data, automated processes and Qlik’s Change Data Capture (CDC) technology enables the company to deliver faster data for decision-makers. Decreasing daily SAP demands also means it can reduce money spent on external SAP contractors.

“The Qlik solution automatically carries over any schema changes at the source to the target and is nearly maintenance-free, to the point that I would say it’s the least maintenance-intensive pipeline we run,” says Matthias. “When I didn’t get any error messages, I had to keep checking that Replicate was still working. It was!”

Looking to the future, Breuninger plans to add new SAP data sources for new use cases and is now looking to extend the use of the Qlik Data Integration platform to other source systems beyond SAP. It is also looking at CDC for other on-prem relational databases.

“Effective use of data analytics in real-time to address customer needs is a critical part of our business as a modern retailer,” concludes Matthias. “With Qlik Data Integration automating the flow of data from SAP and various other systems into BigQuery, we’re confidently able to respond to market changes with the timely data we need for good business decisions.”

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The keys to success

By being able to move the data analysis from SAP to BigQuery, Breuninger was able to save six-figure expenses previously spent on SAP contractors

Previously, data from SAP was only available via daily batch processing but with Qlik data replication it is now near real-time

About Qlik

Qlik’s vision is a data-literate world, where everyone can use data and analytics to improve decision-making and solve their most challenging problems. Our cloud-based Qlik Active Intelligence Platform delivers end-to-end, real-time data integration and analytics cloud solutions to close the gaps between data, insights and action. By transforming data into Active Intelligence, businesses can drive better decisions, improve revenue and profitability, and optimize customer relationships. Qlik does business in more than 100 countries and serves over 38,000 active customers around the world.

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