



Sparkassen-Finanzportal GmbH

Database-as-a-Service for self-service reporting

The Sparkassen-Finanzportal (SFP) is the key partner of the Sparkassen-Finanzgruppe and customer care representative of the Sparkasse banks. Coordinating with more than 400 institutions and affiliated companies, the SFP uses data from internal and external systems to create standardized, data-driven, automated communications.



The challenge

Many data sources, high data volume



The solution

Data, reports and dashboards for all stakeholders



The benefit

Scalable platform as a central marketing data hub

"Coupled with 'raw data' licensing and unlimited queries/SQL queries, Exasol's Analytics Database is the ideal platform for true data democratization, enabling the SFP to quickly gain insights from new data every day."

Christian Schlieker, Lead Strategic Portfolio Management, SFP



The company relies on Exasol's in-memory database to manage huge amounts of customer contact data from multiple sources, and evaluate the customer's journey for better business decisions.

The challenge

SFP needed to understand the marketing efficiency of its channels, the sales value of campaigns, and a customer's journey from beginning to end.

"Given the many different channels, just looking at the raw data is quite a complex matter," said Christian Schlieker, Lead Strategic Portfolio Management, SFP.

Initially, his team focused on standardizing the marketing tech landscape, rolling out Google Analytics in the Sparkassen-Finanzgruppe, and Google BigQuery to store the data volumes. "The cloud-based services offer many advantages. However, we quickly realized that it becomes costly when the processing load in the applications increases. We didn't want the analysts having to think about whether they could send extensive queries to the database," says Christian Schlieker. "Our Data Warehouse is accessed simultaneously by many users, especially in times of crisis, such as the Coronavirus outbreak, when we provide dashboards to help with the crisis communication. Everyone then uses the platform from the umbrella organization to the Sparkasse banks — that's quite a load."

They needed a system that could adapt to multiple simultaneous users. Exasol and two other well-known cloud service providers participated in a proof of concept.

"We found Exasol's in-memory approach very effective in making the

relevant data available for queries from a large number of users," said Christian Schlieker. "Our data engineers prefer Python as their programming language - here, too, Exasol scored well. The interaction between Exasol, BiqQuery, Python, and Apache Airflow as a pipeline tool creates a data architecture in which we can quickly realize even data solutions with complex requirements. Exasol-specific features such as User Defined Functions (UDFs) support the agile development process. This gives us a high degree of future-proofing, enabling us to implement new requests promptly without first having to make extensive additions to the infrastructure and toolchain," adds Christian Schlieker.

"The deployment of the new platform went smoothly. Provided as an EXA-Cloud service, we can focus entirely on the analytics and not worry about running the solution. If we continue to grow, we will be spared the effort of implementation thanks to the Database-as-a-Service," says Christian Schlieker.

The Exasol technology provides a solid foundation even when it comes to licensing: "We deliberately sought a 'raw data licensing model.' Exasol was the best choice. It allows us to execute an unlimited number of queries and SQL queries with an unlimited number of users, and we feel well-positioned for the future."

The solution

SFP's data ecosystem structure consists of several layers. The data is imported into the Data Warehouse from various sources such as Google Analytics, Google Ads, and YouTube. Google BigQuery is the data lake. Above this is the reporting layer provided by Exasol. 'Kommunikationswelt Radar', a dedicated web application with SSO and Microsoft Power BI integration, was created to serve as the access interface. It provides various data solutions for the individual Sparkasse banks, associations and affiliated partners.

The SFP uses a self-service approach. "We want users to be empowered to work independently with data," says Christian Schlieker. "A majority of them are end users at the Sparkasse banks. Some don't want dashboards, they want to work in the database themselves, others are happy to get readymade reports. We also have our own dashboards for the product use, which help us figure out how to provide better support, for example, with tutorials, guides, or other aids. There are also internal stakeholders, such as email marketing managers, campaign managers, or colleagues from the analytics teams who perform very detailed analyses. So we have to consider both how to manage the data volumes and the depth of information the stakeholder needs at any given time."



The benefit

"Unlike our previous system, we have significantly fewer scaling issues. And we like the high iteration speed when new reports are created. We can have the dashboards live within a matter of hours." Christan's team can provide module-based reports to different stakeholders, including a basic set for each Sparkasse bank. "We are now a great deal closer to our goal of becoming the central marketing data hub for Sparkasse banks and affiliated partners with our platform," says Christian Schlieker.

SFP is moving towards marketing automation. "We are looking at ways to im-

prove the targeting of marketing campaigns based on behavioral information. So we deal with the same issues as big e-commerce companies: We want to close the gap between marketing and sales and do holistic tracking."

Other areas of development include applications for digitalization benchmarking within the Sparkassen-Finanz-gruppe and trend monitoring based on social media data. "Our analytical database from Exasol provides us with a solid foundation to do just that."

