

Exasol case study

Exasol's database, combined with Microsoft Azure and Microsoft Power BI, delivers predictive retail analytics and scales on demand

The challenge to optimize retail stock availability

A key problem for retailers is the vast amount of data and the ever-changing sources required to generate predictive analytics.

A high-performance scalable database on Microsoft Azure

Exasol's analytical database, running on Microsoft Azure and using Microsoft Power BI for visualization, enables predictive forecasting capabilities.

Delivering supply chain efficiency through predictive forecasting

With Exasol, more than 1 billion sales forecasts are generated daily and related demand forecasts are exact to the minute, maximizing supply chain efficiency.



Exasol, a Microsoft partner enabling clients to quickly turn their data into value

Exasol, an analytics database company with offices in the United Kingdom, the United States, and Germany, is redefining what it means to work with data. Its high-performance in-memory analytics database transforms how organizations work with data on-premises, in the cloud, or both, quickly turning it into value. Exasol's core verticals include retail and e-commerce, banking and fintech, and healthcare and life sciences. Clients have worked with Exasol when pursuing digital modernization, cloud migration, performance enhancement strategies, and legal hardware replacement. Blue Yonder, a software and consultancy company based in Scottsdale, Arizona, has used Exasol for years.

"On an hourly basis, huge amounts of data flows into our customers' databases," said Jan Karstens, GVP Cloud Platform Engineering at Blue Yonder. "For us to continually provide reliable analyses, a database with high scalability is imperative. More data allows us to make better forecasts."

Exasol is a Co-sell Ready Microsoft silver partner with a Cloud Platform competency. Its database solution, available in the [Azure Marketplace](#), comes in two variants: a pay-as-you-go model or a bring-your-own-license model.

Working with Microsoft products to provide elastic scaling and data visualization

Retailers tread a fine line between out-of-stock risk and lost sales because of excessively thin margins. They must handle huge volumes of data every hour and access it in nearly real time to make accurate decisions about issues such as stock optimization. To provide this critical and reliable analysis, a highly scalable analytics database is essential.

Exasol's database drives predictive retail analytics with in-memory processing ingrained in its core architecture. Exasol's algorithms allow for significantly faster access times, and with its massively parallel processing, queries can be answered significantly faster because of data being distributed across all of a cluster's nodes. Plug-in options such as virtualization capabilities allow customers to connect to, and analyze data from, more sources, and language extensions support the chosen programming language.

Azure infrastructure services enable customers to deploy Exasol in a highly available, scalable, and affordable way. Customers can use Exasol as a data acceleration layer or as a complete data warehouse. Exasol on Azure, combined with Power BI, provides predictive forecasting and rich visualizations. Azure enables Exasol to deliver scalability, as well as quick and flexible adjustments to growing retail data volumes and sources, while efficient compression algorithms and self-tuning capabilities reduce administrative costs.

With Exasol, retailers can determine the optimal stored quantity of products, ensuring that shelves are filled and logistic costs are reduced.

"Businesses need analytics and reporting tools that work as fast as the world changes around them. They need their team to be able to work with data with ease, day in and day out. They need to turn insights into value faster than ever before. And that's exactly what Exasol and Microsoft Power BI are making a reality."

- Aaron Auld, CEO, Exasol