

# NEXER



## FACING A COMPLEX DATA MANAGEMENT CHALLENGE WITH A MODERN DATA PLATFORM

### BACKGROUND

Preem, a leading Swedish petroleum and biofuel company, has distinguished itself with a pioneering data-driven decision-making strategy. Their unique plan involves establishing a lakehouse data platform on Azure and Data, providing unparalleled data accuracy and insights.

In 2021, Preem pushed forward its climate target by ten years, aiming for a climate-neutral value chain by 2035. This ambitious target sets a high bar, making it the industry's most ambitious. Our investments and solutions are dedicated to reducing emissions and demonstrating our unwavering commitment to sustainability.

### AT A GLANCE

**Company:** Preem

**Industry:** Petroleum & Biofuel

**Employees:** 1,500

**Objectives:**

- . Create a lakehouse data platform on Azure to deliver precise data and valuable insights
- . Reduce unnecessary expenses while achieving objectives and following established best practices and industry standards

**Products:**

- . Azure Databricks
- . Azure Data Factory
- . Microsoft Purview
- . Microsoft Power BI
- . Databricks Unity



## CHALLENGE

Preem faced the challenge of establishing a data-driven decision-making strategy to capture and manage accurate data, address sustainability goals, and optimize product sales. They invested in Microsoft projects and Databricks to achieve these objectives. To achieve their goals, they needed to consider their green sustainability efforts while balancing customer needs with price, volume, and the composition of renewable and non-renewable materials. Preem also faced a complex data management challenge, which led them to establish an Azure data lake. This approach, which harnesses the power of data lakes, is the

best way to become data-driven. They transitioned to a shared data platform and initiated the Planning and Forecasting project to optimize product sales. The project provides advanced capabilities and insights for finance and other stakeholders. The investment in Databricks enabled Preem to significantly reduce the time for event analysis. The project's success is a testament to Preem's commitment to sustainability, and it is expected to continue evolving and innovating, including exploring the potential of AI/MLOps to achieve their goals.



Data lakes can propel companies toward their green sustainability goals when effectively utilized. These lakes facilitate the collection and storage of large volumes of raw data and provide companies with the accurate and timely data they need to make informed decisions. This includes tracking resource usage, analyzing environmental impact, and understanding customer preferences for sustainable products, offering a promising future for data management in the energy sector.



## SOLUTION

The investment in Microsoft projects resulted in implementing an Azure data lake and a significant investment in Databricks, focusing on adhering to best practices and reference architecture from both platforms. As a Microsoft Solutions Partner, Nexer Insight was engaged to determine the best ways to expose and ingest data across the entire platform, utilizing a reference architecture that has been simplified to trim excess overhead costs while still meeting Preem's demands.

To ensure success, Nexer Insight set up discovery workshops with Preem to understand the reference architecture they were trying to capture and to use Databricks' Unity catalog. By leveraging their expertise and experience, Nexer Insight developed a customized reference architecture to meet Preem's specific needs while still adhering to best practices and industry standards. This simplified architecture helped trim excess overhead costs while ensuring that Preem's demands were met.

# CLIMATE-NEUTRAL OPERATIONS WITH NET-ZERO EMISSIONS BY

# 2035



## BENEFITS

The implementation of BI reports and the data warehouse is still being tested. Discussions are ongoing about two other projects related to planning and forecasting and CRM, focusing on achieving a harmonized view of end customers. The company is excited about the potential of AI/MLOps, which is currently being tested in parallel with the data platform implementation. The Machine Learning pipeline is integrated with Databricks, and the company has already seen great results from investing in this technology. Preem has identified hundreds of use cases for Machine Learning within its operations and plans to leverage this technology heavily. The first POC for MLOps will serve as a reference for future projects, and the company is eager to explore other areas suitable for machine learning. The tools tied to Databricks will be used more extensively in this effort.

## RESULTS

Preem is very satisfied with its investment in Databricks and will continue prioritizing practical solutions that provide tangible benefits. Their investment in Microsoft projects and Databricks has enabled them to capture and manage accurate data, address their sustainability goals, and optimize product sales. The project's benefits were evident, and Preem was eager to apply machine learning to other areas suitable for their platform. The investment in Databricks allowed Preem to reduce the time for event analysis significantly. The project's success is expected to continue, and Preem will continue to innovate in its data-driven approach and sustainable business practices.

“ I am proud to partner with Preem, who is taking the leading position within their industry in their journey towards establishing a data-driven and sustainable business. Working together, we successfully implemented practical solutions and technologies that provided tangible benefits, enabling Preem to achieve their goals and stay ahead in a rapidly evolving industry. It's been a privilege to be a part of their success story.

-Carl Tonseth, Business Manager IoT & AI, Sweden



Find out how Nexer Insight can help your organisation:

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