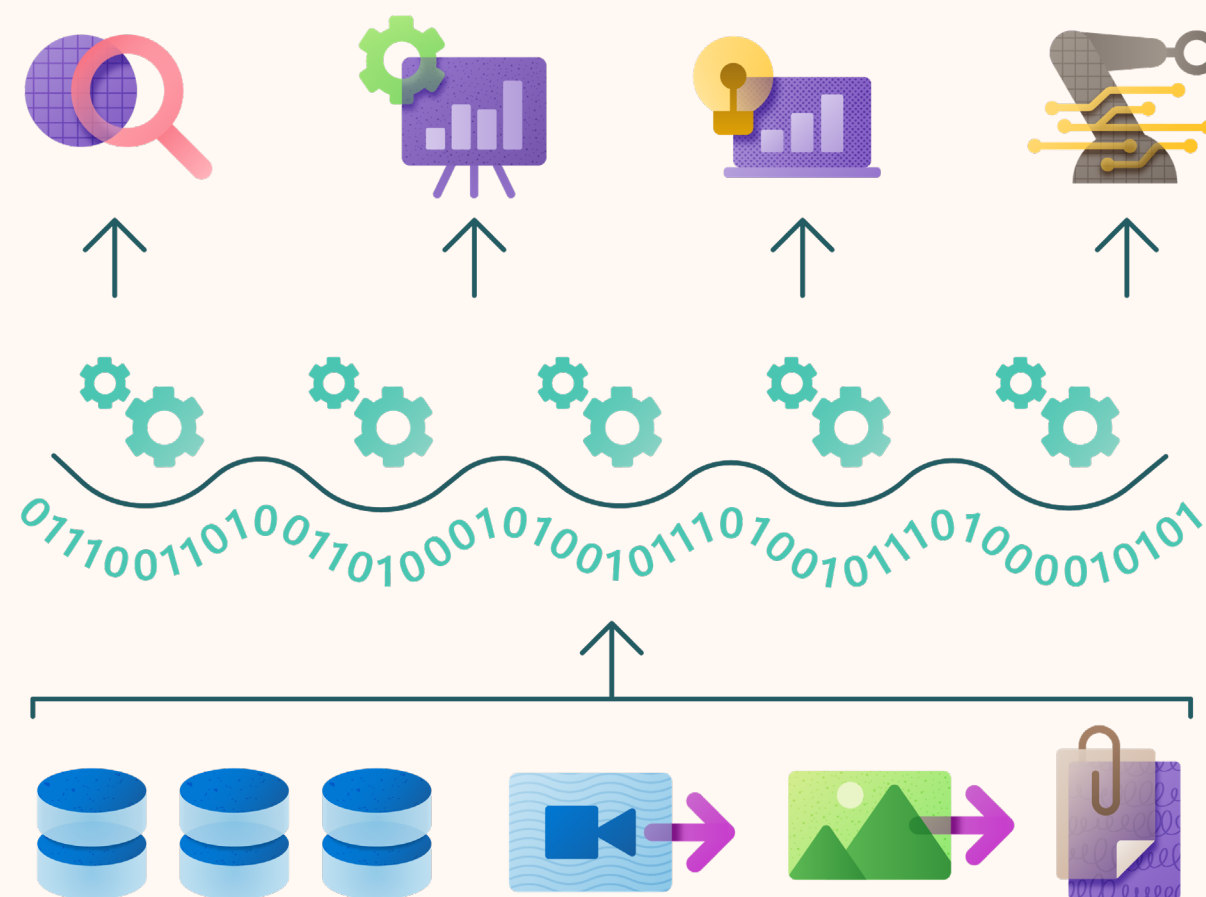


Lakehouses explained

Transformative use cases in analytics

What is a lakehouse?

A data lakehouse is a unified data management solution for storing and processing data to accelerate business insights, ensure data freshness, and take advantage of AI for more advanced analytics workflows.



The best of both worlds

Lakehouses merge the most desirable traits of data lakes and data warehouses to create a more scalable analytics engine for enterprises.

The best of data lakes



The best of data warehouses

- > Flexible storage
- > Cost-efficiency
- > Scalability
- > Fast querying time

- > High-performance querying
- > Atomicity, consistency, isolation, and durability (ACID) compliance
- > Security
- > Consistency

Why use a lakehouse?

A two-tier data architecture made up of data lakes and warehouses results in longer wait times for reliable data, slowing time to insights. Lakehouse architecture solves these issues by allowing you to use Spark and SQL engines to quickly store, manage, and analyze large volumes of data, accelerating queries to actionable insights at optimal cost.

The power of a lakehouse

- | | |
|--|---|
| Share a single copy of data | → Reduce duplication |
| Store data in an open format | → Process large-scale data sets |
| Govern data with a unified catalog | → Democratize access and ensure consistency |
| Support AI and machine learning capabilities | → Accelerate time to deeper business insights |

What can you accomplish with a data lakehouse?

- > Enrich analytics workflows with AI and machine learning.
- > Process data in real time to uncover relevant insights quickly.
- > Create a single source of truth for your analytics workflows.
- > Perform historical trend analysis and long-term performance evaluation.
- > Use business intelligence tools to generate insights from raw data.
- > Enable fast data exploration and discovery.
- > Control access to your data and perform audits.
- > Share data sets and reports across teams.

Accelerate actionable insights with Azure Databricks and Microsoft Fabric

Azure Databricks is a fully managed lakehouse in Azure that integrates seamlessly with analytics tools in Fabric.

Learn more about lakehouse analytics with Fabric and Databricks.

[Read the e-book >](#)