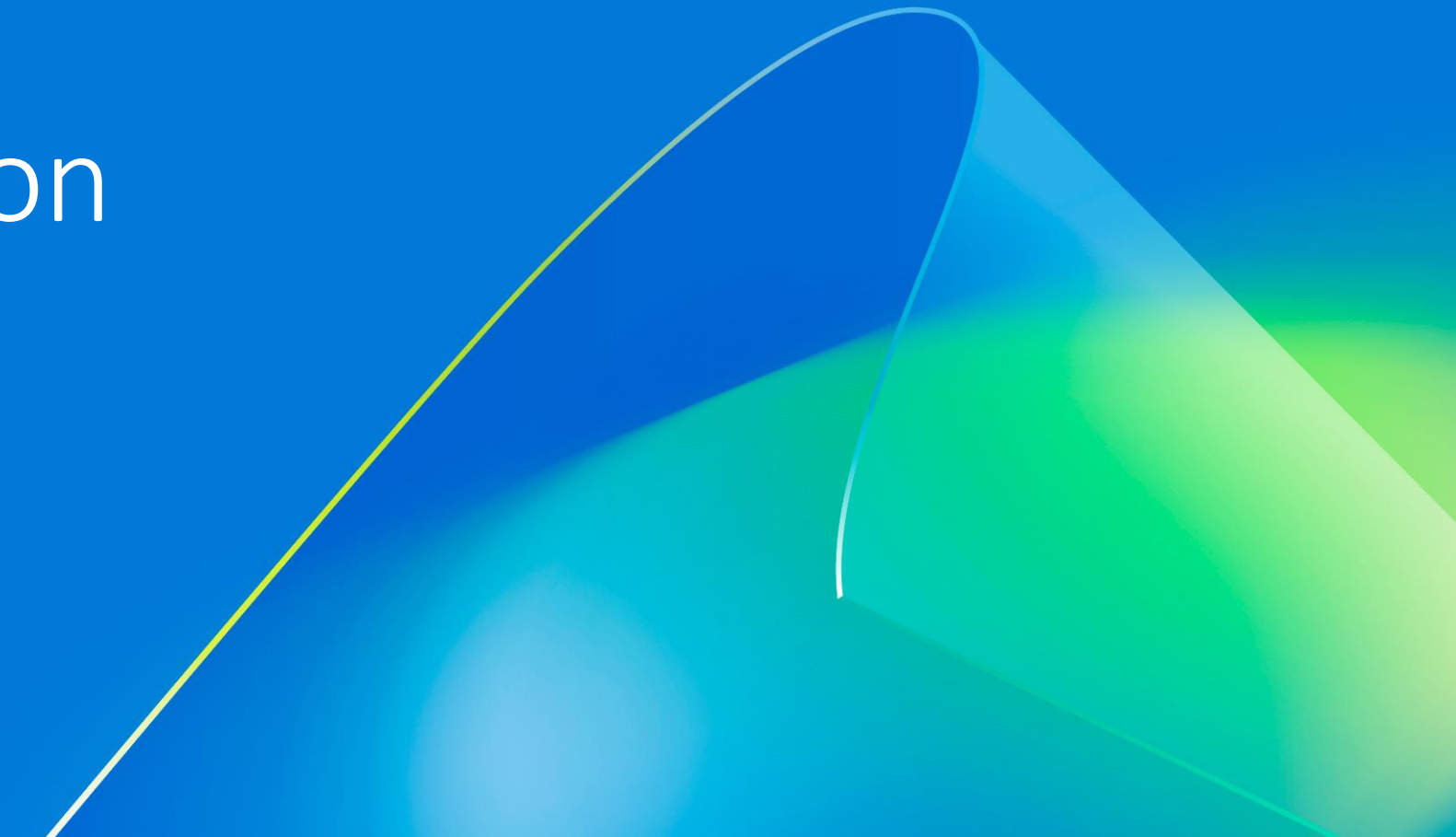
3Cloud

Activate your data for AI innovation



Microsoft Azure

Introduction

Data leaders are scrambling to bring AI to their organizations. Generative AI and large language model services, such as those offered by Microsoft Azure AI, are enabling businesses to use and create everyday AI experiences that are reinventing how employees spend their time.

Powering differentiated AI experiences requires clean data from a well-managed and highly-integrated analytics system. But most organizations are still challenged by a labyrinth of siloed data—often of poor quality—that requires costly integration and ongoing maintenance. Far too often, businesses find themselves stitching together a complex set of disconnected services from multiple vendors. This process can be expensive and inefficient, and it also leaves organizations open to data governance and security risks.

As a Microsoft partner that works with organizations just like yours, we've found that Microsoft is the best destination for analytics and AI. We also understand the intricacies of the Azure ecosystem, so we can help design, build, and optimize analytics and AI architectures that meet your specific needs. It all starts with transforming how you work with your data.

of leaders agree that data problems are the most likely factor to jeopardize AI/machine learning goals[1]

2x

increase in unstructured data managed by enterprises in 2024[2]

of leaders intend to implement data modernization efforts in 2024 to take advantage of generative AI[2]

1. MIT, Becoming an AI-driven enterprise, September 2022
2. PWC, 2024 AI Business Predictions, 2023

Data is the oxygen of digital transformation in the era of AI

Your company is sitting on a trove of data that can be activated to drive analytics and AI innovation across your business. However, AI is only as good as the data it's based on, and we see every day that many businesses are still struggling to gain full access to their data across siloed systems. It can seem like a daunting task, particularly considering that the problem just gets worse as more data is collected.

That's why we find the Microsoft process so valuable. It all starts with unifying your enterprise data estate. When you do that, you can transform your data and empower everyone in your business, while ensuring you have the security and governance you need.

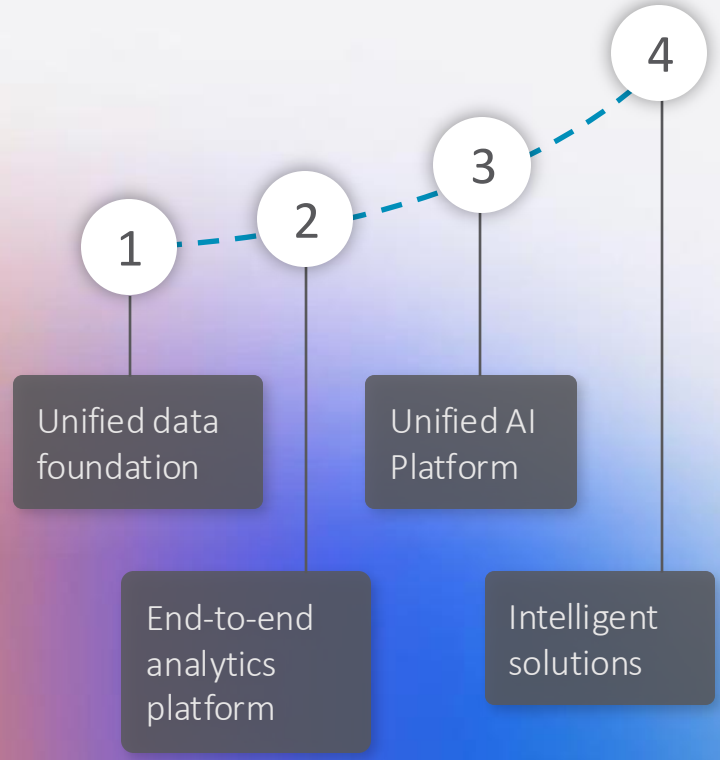
A lakehouse approach unlocks the true value of your data

Unifying your data lies at the core of the Microsoft approach because it helps you eliminate traditional data siloes and ensure you have good, clean data. This is accomplished through delivering an open and governed lakehouse foundation. A perfect blend of data lakes and data warehouses enables you to build analytics and AI applications that work across all your data today as well as any data you incorporate in the future. It also helps to ameliorate the problems caused by many data lake approaches today, like proprietary data formats that require data duplication.

Microsoft Fabric champions the lakehouse approach by using OneLake to deliver a unified analytics platform. OneLake is an open, governed lakehouse that operates as its underlying software-as-a-service (SaaS) storage. OneLake also uses the same format as Azure Databricks. That means if you're already using Azure Databricks—or you want the granular programming it offers—it's simple to extend. Whichever you use, you'll be able to

- Easily connect to the cloud and services you need.
- Take advantage of a unified SaaS experience and architecture that provides role-specific capabilities for all data professionals.
- Equip everyone with access to powerful, self-serve analytics to innovate faster, enabling real-time insights that unlock impact.
- Seamlessly augment analytics systems with generative AI to reduce data estate fragmentation.

A step-by-step approach to effective AI



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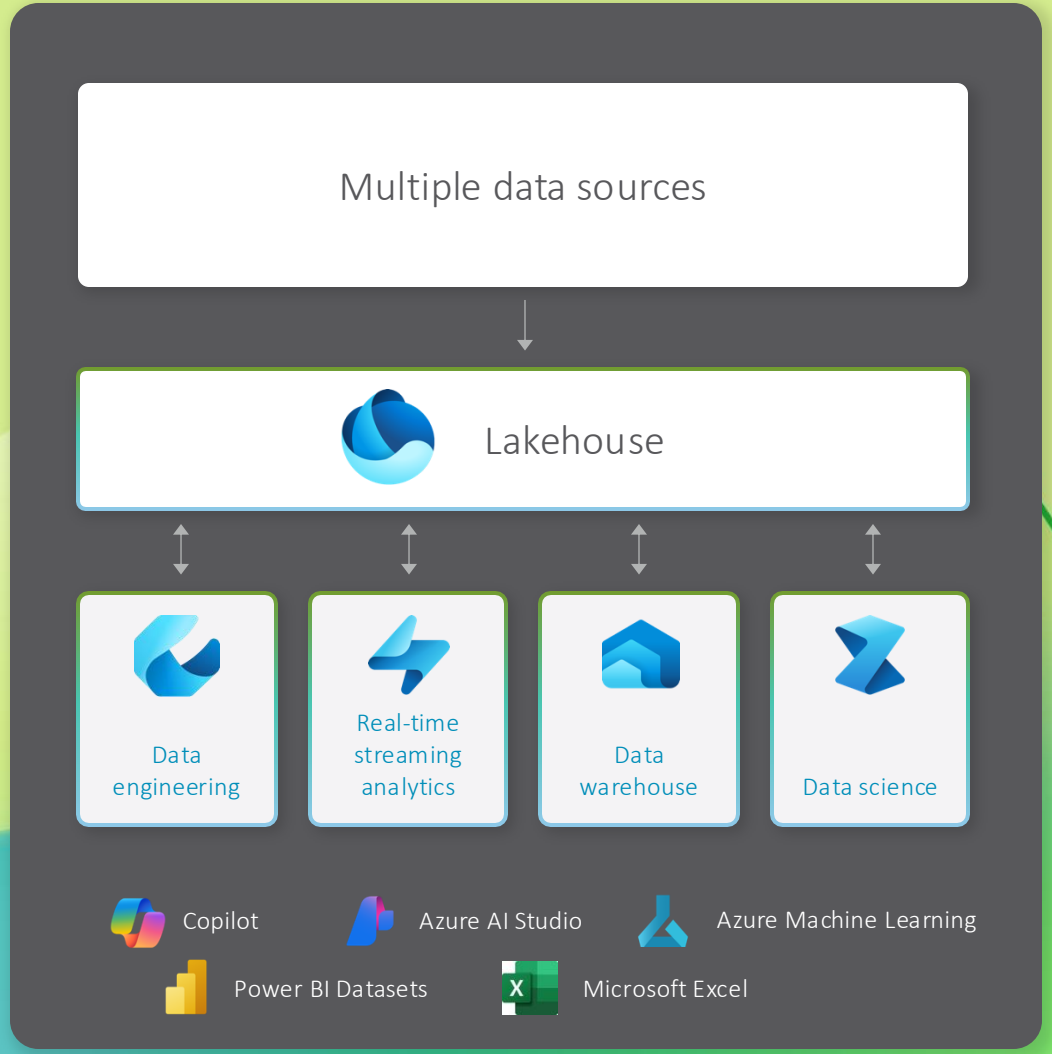

Accelerate analytics and AI with a unified data foundation

Microsoft data and analytics platforms centralize all data and analytics on a single, open, governed foundation. That means you can reduce cost and simplify analytics by centralizing and curating all your data and analytics workloads in the cloud. You'll also be able to reduce the time and effort required to unlock impact from data.

For instance, you'll be able to build and scale cost-effective, performance-optimized business intelligence, machine learning models, generative-AI solutions, and analytics applications. And that means you can empower everyone in your business with secure and easy access to powerful analytics.

A full breadth of solutions for your AI-powered business

Are you tired of searching through the thousands of data and AI offerings to find the right one for you? Are you unsure of how to integrate them, much less do it in such a way that is scalable and can evolve over time?

Using Microsoft data and analytics solutions, we can help you spend more time focusing on the results of your tools, instead of integrating specialized solutions and maintaining your data estate.

Both Microsoft Fabric and Azure Databricks are end-to-end data and analytics platforms that enable you to unify your data, transform that data, and uncover insights to create better outcomes. And no matter where you are in your data transformation journey, Microsoft solutions—along with our services—can help you get a full and complete stack that's designed to work together.

Microsoft data and analytics solutions power AI innovation using a lakehouse foundation

Microsoft Fabric

A unified analytics platform that brings together all the data and analytics tools that organizations need

Azure Databricks

A cloud-based data processing platform that provides a collaborative environment for data scientists and engineers

Open & Governed Lakehouse Foundation

UK retailer Marks and Spencer uses Azure Databricks and Power BI to drive powerful insights

M&S

> “Having all of our data in one single place that is clean and performant has allowed us to quickly build reporting and dashboards that are able to refresh considerably quicker than our legacy on-premises platforms, ultimately helping improve the speed to insight for the business.”

—Anthony Reed, Foods Data Product Manager, Marks & Spencer

Situation

After undergoing a data consolidation on-premises, Marks & Spencer’s legacy system continued to support many analytics and reporting initiatives, making it difficult to keep up with customer and retail demands in real time while also trying to scale systems and reporting.

Solution

Wanting to move beyond the strain and costs of on-premises systems, Marks & Spencer created a cloud data platform and took advantage of Azure Synapse Analytics and Power BI for easy analysis and reporting of data.

Impact

The implementation of Azure Synapse Analytics and Power BI resulted in significant improvements in data analysis efficiency, decision-making processes, and operational optimization. Overall, they’re spending less time crunching numbers and more time engaging with customers.

READ FULL STORY

ZEISS Group uses Microsoft Fabric to advance innovation with data analytics and AI

> Data sharing is key, and eVA, supported by Fabric on Azure, could provide the foundation for a trusted analytics solution that we can easily share across our business units."

—Markus Morgner, Head of Enterprise Data Platform & Engineering, ZEISS Group

ZEISS Group is committed to scaling AI innovation for its advanced optical solutions, products and digital offerings.

Situation

The team needed a modern analytics solution to streamline its analytics workflows and provide internal business units with frictionless access to information.

Solution

ZEISS Group took advantage of Microsoft Fabric to connect and combine all its business data in a unified and governed hub without duplication or movement.

Impact

Their new solution has allowed teams to increase use of AI and be more insight-driven, reducing the time to create new products and enabling business growth with self-service capabilities.

READ FULL STORY

Aurizon uses Microsoft Fabric to take advantage of its data streaming functionality and AI and machine learning capabilities

> We're also benefiting greatly from the data streaming capability of Microsoft Fabric and consumption through Direct Lake in Power BI as an answer to HANA's virtual modeling capability, allowing us even greater scalability."

—Chris Nunn, Principal Data Engineer, Aurizon

Situation

Having already fitted the majority of its fleet with telemetric sensors relaying data to Microsoft Fabric, Australian freight rail operator Aurizon wanted to reimagine its entire analytics estate and move from traditional data warehousing to a modern, scalable analytics platform so it could get the most out of its data.

Solution

Instead of selecting several tools for this modernization effort, Aurizon chose Microsoft Fabric as its single, unified data and analytics platform. The streaming architecture allows for direct data consumption without duplicating data (using Direct Lake mode in Power BI), replacing the need for Aurizon to create and maintain data sets in the future.

Impact

Having brought its enterprise data and telemetry data together in Microsoft Fabric, Aurizon has seen performance gains up to 240 times. Aurizon plans to use Azure Machine Learning and Copilot in Microsoft Fabric to continue to drive better outcomes for customers, using data and predictive analytics to transform business practices.

READ FULL STORY

Using advanced analytics and Azure Databricks to automate processes and prevent failures

DEUTSCHE BÖRSE GROUP

> Thanks to the rich ecosystem of Azure services, we could start innovating right away. Post-trading processes and their infrastructure must be fast, high-performing, scalable, and able to support straightforward data exchange, while also offering a high level of security and protection for our sensitive data. Azure does all this for us."

—Michael Girg, Chief Cloud Officer, Deutsche Börse

Situation

Clearstream is a subsidiary and central securities depository of Deutsche Börse Group, which ensures smooth and compliant processing of its customers' transactions. Previously, a locally hosted data platform was used for this purpose. The result: data silos, cost-intensive hardware purchases, and a long time to-market for new services.

Solution

Today, a centralized data platform based on Azure and Power BI enables automated processes and the development of new advanced analytics services. Thanks to various dashboards, even customers and users without technical expertise can easily work with this data.

Impact

Clearstream has avoided data silos through centralized, automated data processing, while enabling faster decisions and insights through centralized visualization of data. It has also accelerated development of new services thanks to the flexibility and scalability of the cloud.

READ FULL STORY

Let’s continue the conversation

Join 3Cloud as you embark on your AI journey. Let our team guide you through the process of choosing the right Microsoft data and analytics journey. We look forward to discussing how we can help your business confidently embrace the era of AI and transform your business.

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