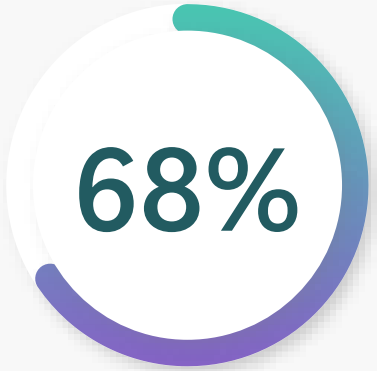
Microsoft | Microsoft Fabric

Microsoft Fabric

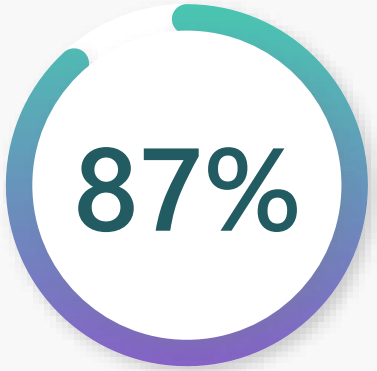
Prepare your data for AI innovation

The future of AI is here



of leaders agree unifying their data platform for analytics and AI is crucial for their enterprise data strategy

even a 10% boost in data usability could mean over $2 billion more annual revenue for the average Fortune 1000 company



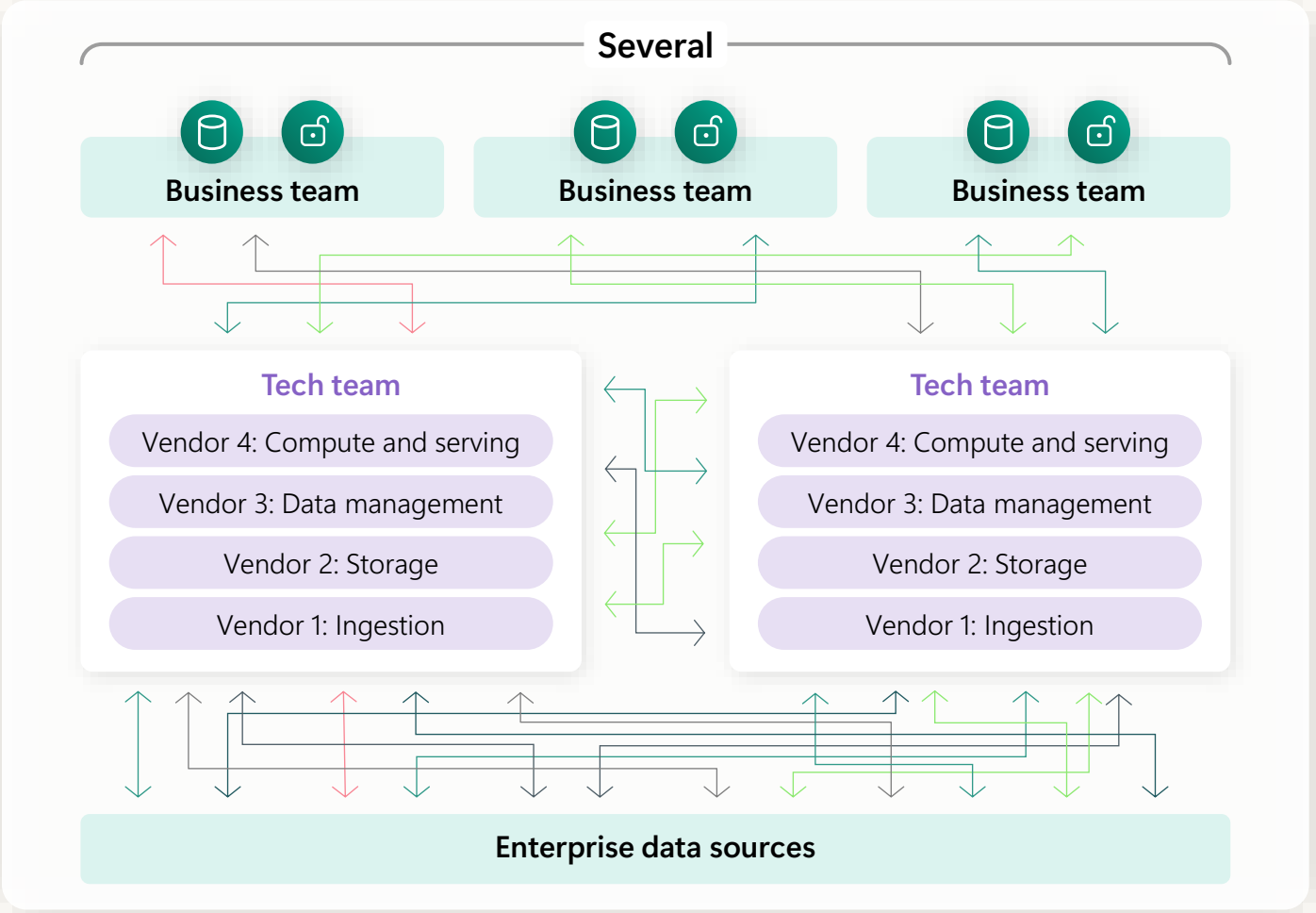
of organizations believe AI will give them a **competitive edge**

Source: MIT Sloan Management Review
Source: Databricks: CIO vision 2025, Bridging the gap between BI and AI

CIOs are accelerating their efforts to bring AI to their data estate

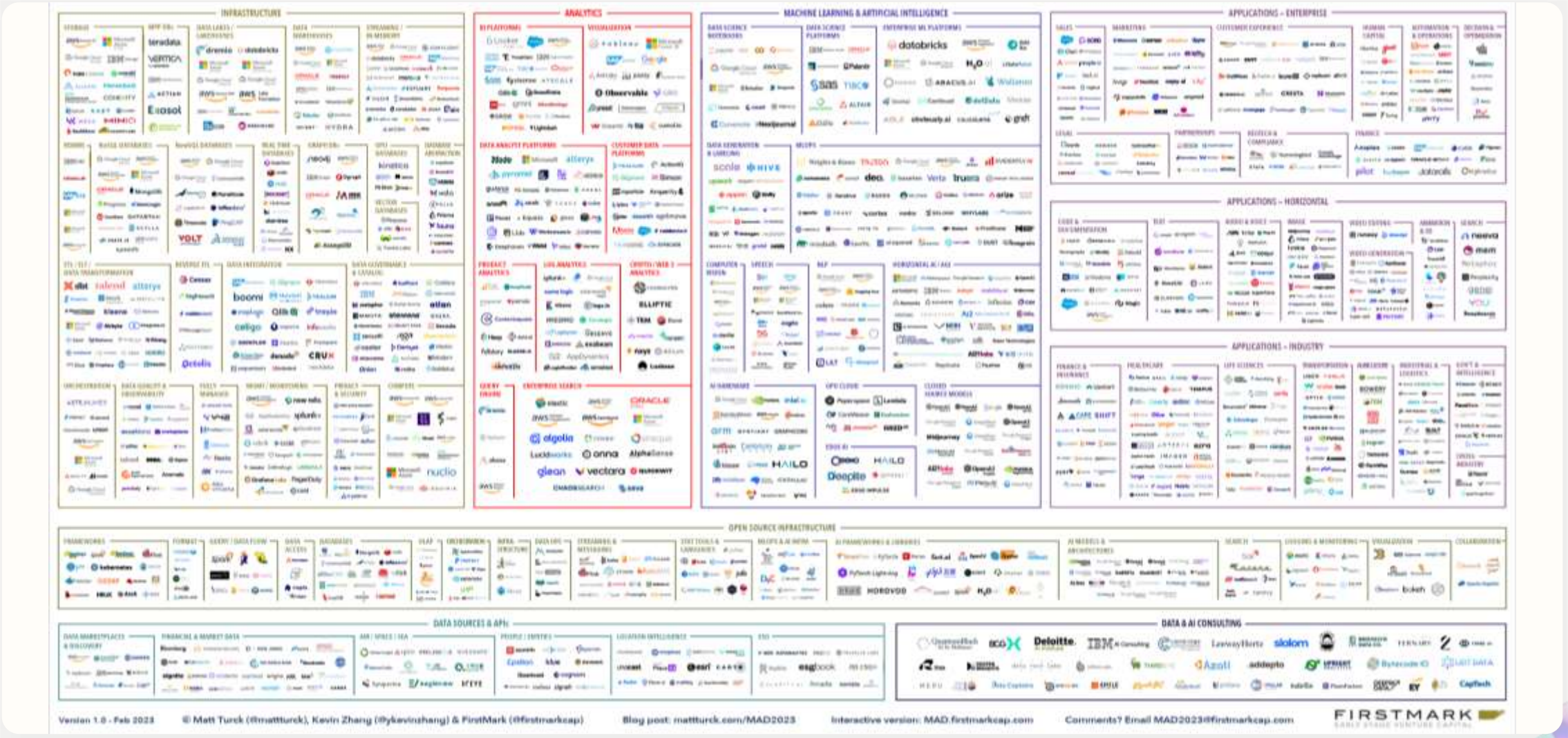
AI will only exacerbate your existing data issues

A complex, organically evolved data estate



1. Data copies and infrastructure inefficiencies
2. Limited interoperability between vendor services
3. Data exposure risks

Customers enhancing their data estate face immense complexity



Azure Data

Transform your data into your competitive edge

Comprehensive | **Secure** | **Integrated**

Optimize for your needs

Turnkey

Microsoft Fabric

Control and Customization

Azure Databricks

Azure Databases

MongoDB. ORACLE snowflake®

Introducing Microsoft Fabric

Microsoft Fabric

The data platform for the era of AI

From		To
Multiple analytics services	»	Unified stack
Disconnected data sources	»	All the data in one place
Isolated application	»	Entire estate
Gen AI bolt on	»	Gen AI built in

Microsoft Fabric

Data Factory

Real-Time Intelligence

Databases

Analytics

Industry Solutions

Power BI

Partner solutions

Copilot in Fabric

OneLake

Microsoft Purview

See how others are already using Microsoft Fabric

One NZ democratizes data access, enabling customer support with Microsoft Fabric Real-Time Intelligence

one.nz

“

Previously, you needed to be a data engineer or scientist to access and understand customer information. Now we’re making it user-friendly, so anyone can easily make data-driven decisions.

– Strathan Campbell, Channel Environment Technology Lead, One NZ

Situation

Seeking to improve customer experience, New Zealand telecom giant, One NZ, wanted to take its performance to the next level. Increasing data volumes were leading to delayed refresh rates and One NZ needed a solution with real-time data and analytics capabilities they could easily implement with their existing systems.

Solution

One NZ selected Microsoft Fabric’s Real-Time Intelligence (RTI) and went from concept to delivered product in just two weeks. Using event streams to ingest data from external data sources and run analytics on top of its real-time streaming data, One NZ was able to generate immediate actions on their data for quicker decision-making.

Impact

With Microsoft Fabric’s RTI, One NZ has improved overall customer experience. All teams have access to high quality data that can be used in ML models, plus, dashboards are updated 6x faster than before, so agents can identify customer behavior patterns and respond to customers more quickly than ever.

Read full story here

Milliman enables self-service actuarial modeling and mitigates business risk with Microsoft Fabric

Milliman

> Milliman is tremendously excited about Microsoft Fabric. We see that Microsoft Fabric will be critical for our professionals and insurance industry clients to realize the full potential of AI to protect the health and financial well-being of people everywhere.
>
> *– Ken Mungan, Chairman, Milliman*

Situation

Milliman needed a modernized data analytics platform for actuaries to build custom data pipelines and quickly and accurately analyze terabytes of data.

Solution

Milliman leveraged Microsoft Fabric as their all-in-one analytics solution. They centralized all data and analytics workloads on a single, open, governed foundation, enabling actuaries with self-service analytics tools to build AI, analytics applications and ML models easily on a data lake-based architecture for near real-time insights.

Impact

Milliman's new unified infrastructure expedites data access, while Fabric's OneLake storage system means fewer data copies, making for more efficient reporting and reduced latency and cost.

Read full story here

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

AURIZON

“

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 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 Fabric as its single, unified data and analytics platform, in which 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 datasets in the future.

Impact

Having brought its enterprise data and telemetry data together in Microsoft Fabric, Aurizon has seen performance gains up to 240x. 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 here

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 leveraged 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 here

Microsoft Fabric capabilities

Microsoft Fabric

The data platform for the era of AI

AI-powered data platform

Give your data teams all the AI-powered tools they need for any project in an optimized SaaS environment.

Open and AI-ready data lake

Access your entire multi-cloud data estate from a single data lake and ensure data is ready to power AI innovation.

AI-enabled business users

Empower everyone to better understand data with AI-enhanced experiences and visuals embedded in the apps they use everyday.

Mission critical foundation

Deploy and manage Fabric with category-leading performance, instant scalability, shared resilience, and built-in security, governance, and compliance.

AI-powered data platform

Give your teams the AI-powered tools needed for any data project in an optimized SaaS environment

Accelerate time to value with a SaaS experience that requires minimal set-up, is automatically optimized and integrated, and has a single pool of capacity to power every workload.

Empower data engineers, data scientists, analysts, and business users with AI-powered tools that help them get more done in less time.

Create powerful, insight-driven apps at cloud scale with a simplified, translytical, SaaS database experience that unites transactional, analytical workloads.

Open and AI-ready data lake

Access your entire multi-cloud data estate from a single data lake and ensure data is ready to power AI innovation

Unify your multi-cloud and on-premises data with OneLake, enabling a single copy to power multiple analytics engines while reducing duplication and data movement.

Ingest structured and unstructured data of any format into OneLake's open Delta Parquet format and even access third-party tools from industry leaders built directly into Fabric.

Ensure everyone has access to the right data with a central data lake that spans the entire organization and intuitive data management and discoverability tools.

AI-enabled business users

Empower everyone to better understand data with AI-enhanced experiences and visuals embedded in the apps they use everyday

Save time for analysts and provide up-to-date insights with tools like Copilot in Fabric and Direct Lake mode.

Empower business users to quickly answer questions and understand the most important insights in a Power BI report by simply asking Copilot.

Foster a data-driven culture by seamlessly and securely embedded insights into Teams, Excel, PowerPoint, Outlook, and more with native integration.

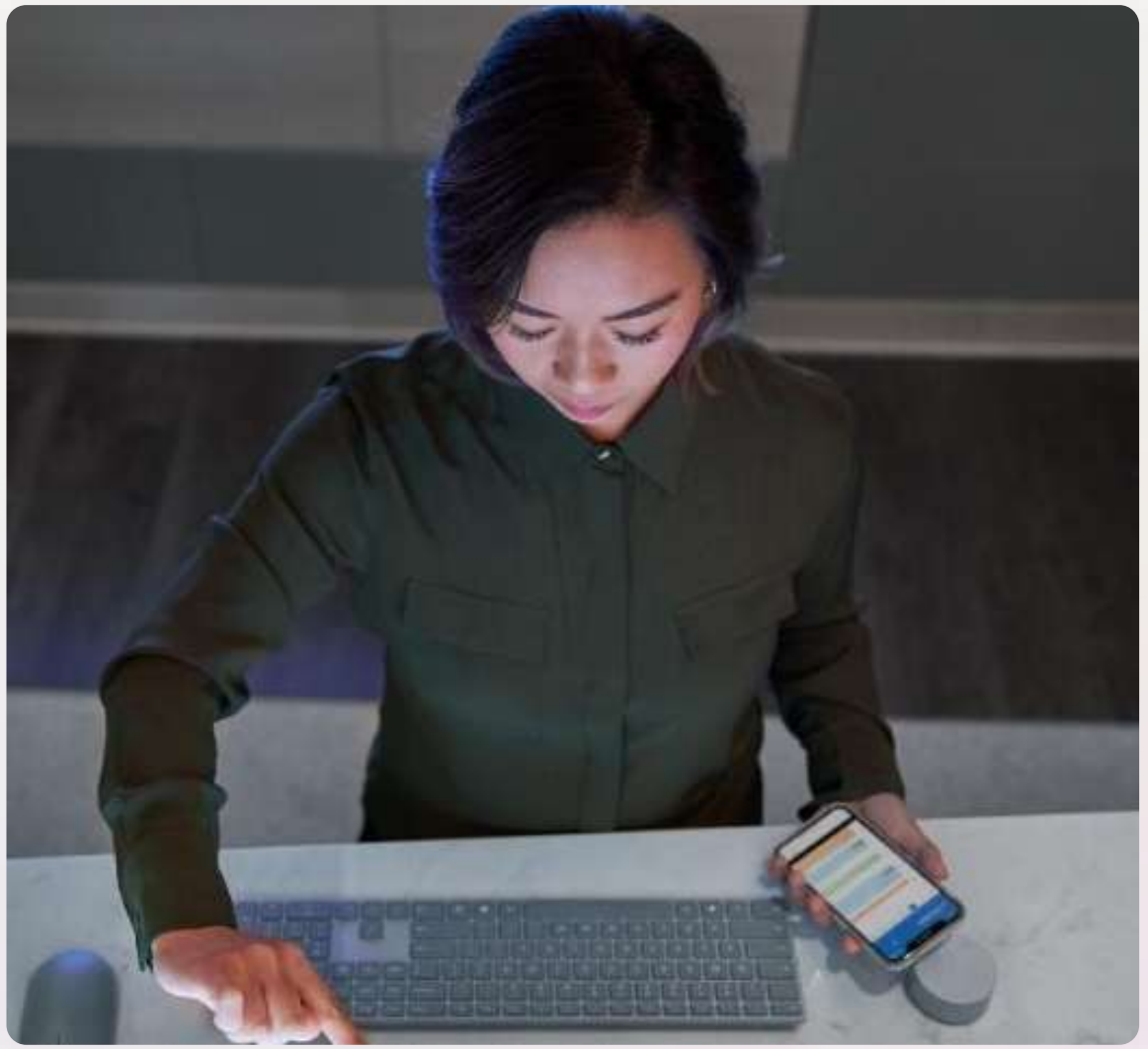
Mission critical foundation

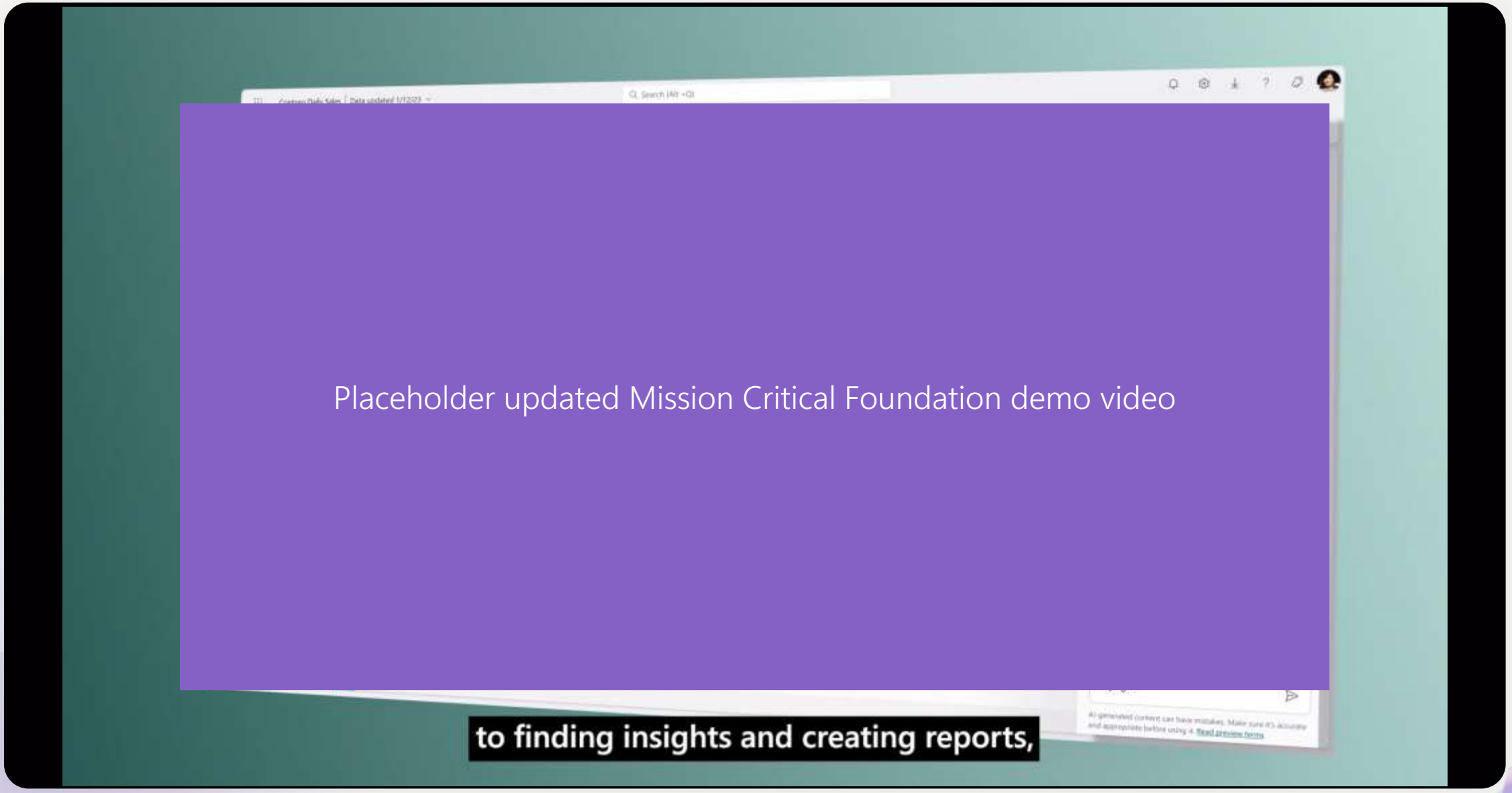
Confidently deploy and manage Microsoft Fabric with category-leading performance, instant scalability, shared resilience, and built-in security, governance, and compliance

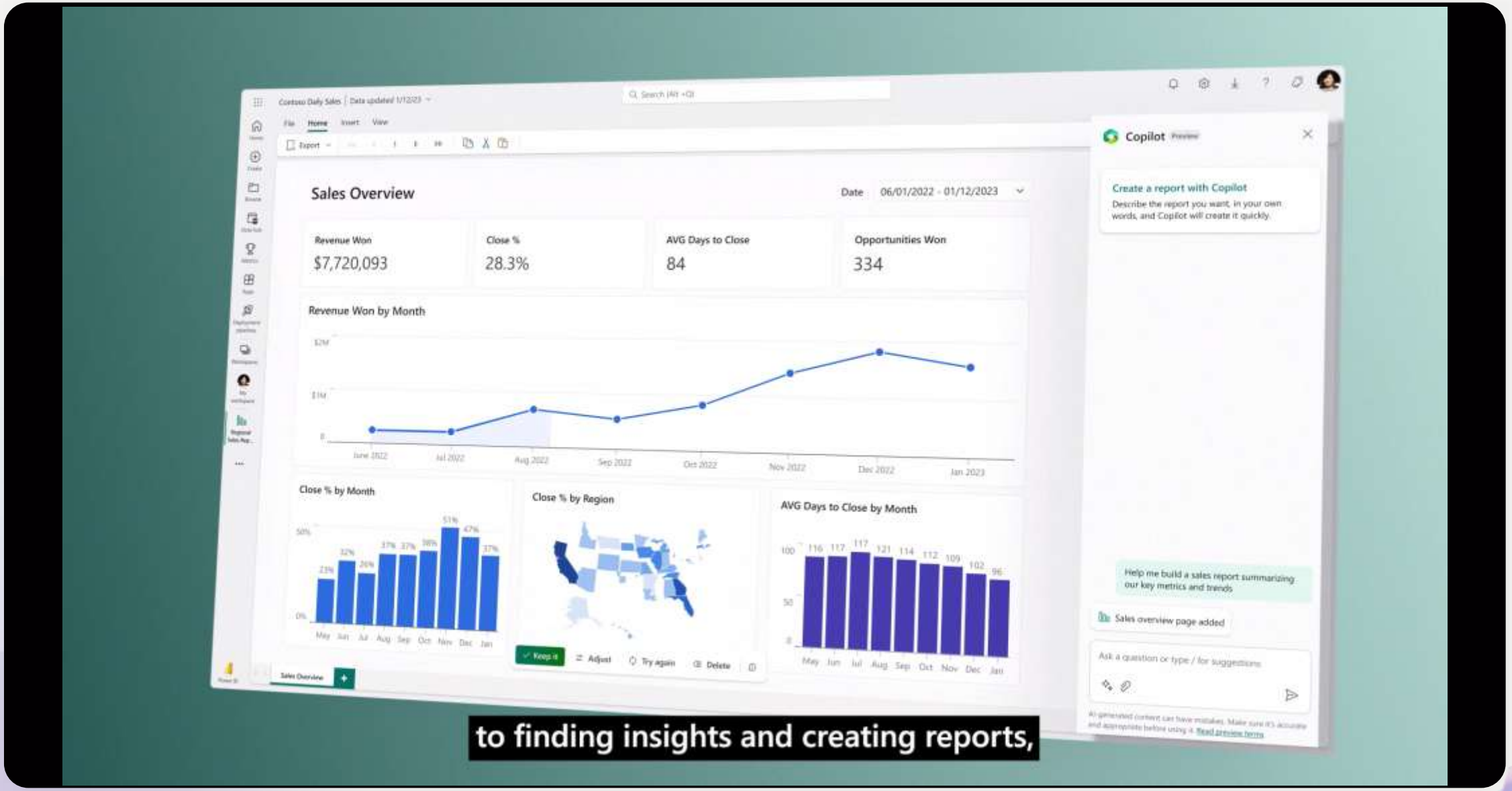
Design mission-critical systems on Fabric with a resilient foundation built on world-class infrastructure and built-in BCDR resilience tools.

Manage and govern data across a unified platform with industry-leading security and built-in federated governance tools.

Process massive amounts of data with industry-leading performance across analytics engines.




Placeholder updated Mission Critical Foundation demo video
to finding insights and creating reports,


Sales Overview
Date 06/01/2022 - 01/12/2023
Revenue Won
$7,720,093
Close %
28.3%
AVG Days to Close
84
Opportunities Won
334
Revenue Won by Month
Close % by Month
Close % by Region
AVG Days to Close by Month
Copilot
Create a report with Copilot
Describe the report you want, in your own words, and Copilot will create it quickly.
Help me build a sales report summarizing our key metrics and trends
Sales overview page added
Ask a question or type / for suggestions
to finding insights and creating reports,

Build your own powerful Gen AI experiences

Enhance data insights

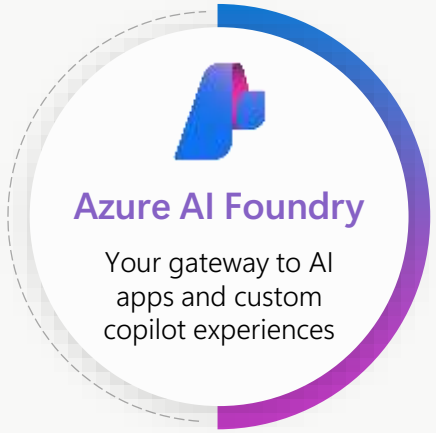
Build enterprise chat applications to uncover insights using natural language from structured, unstructured, and real-time data

Analyze customer interactions

Build speech analytics applications to enhance customer service, tailor support responses, and make data-driven decisions

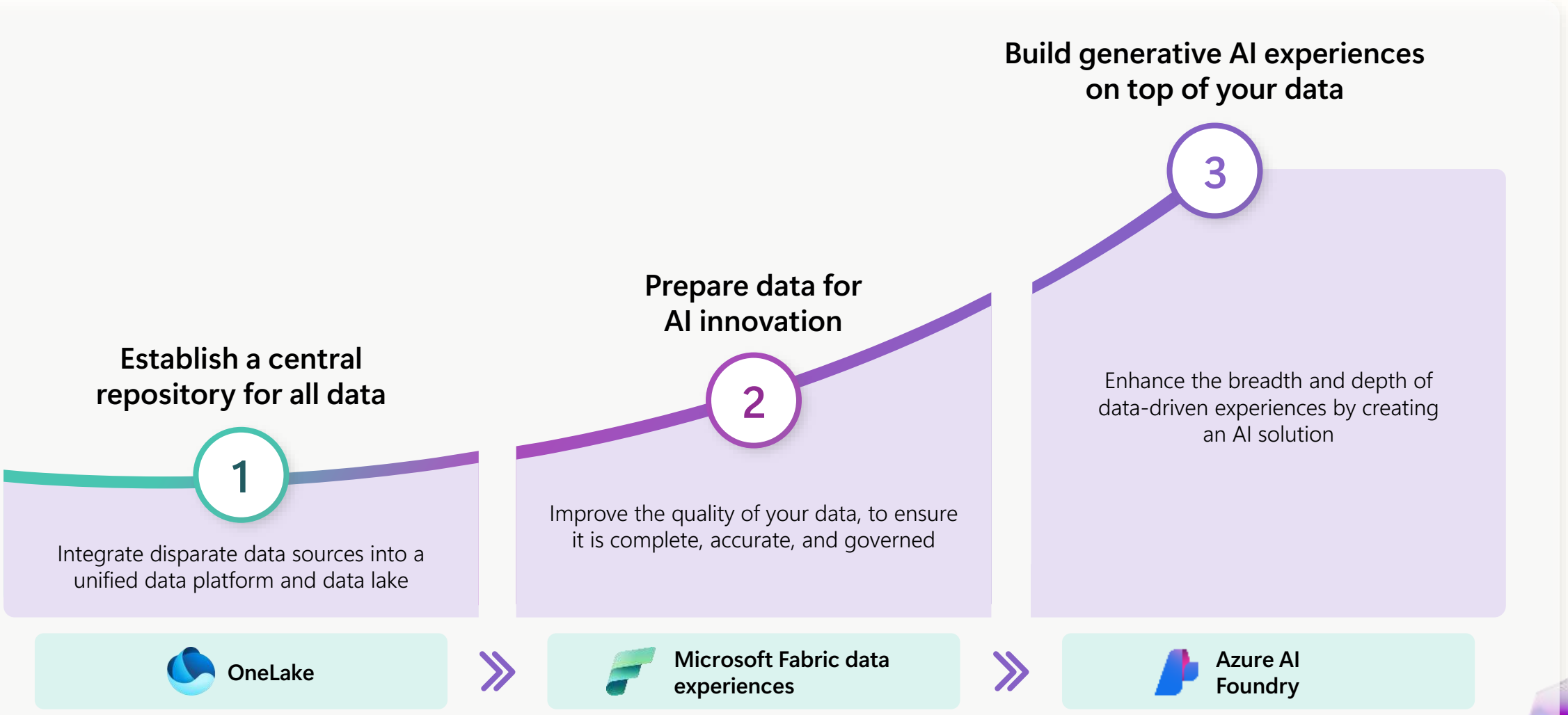
Customize machine learning models

Train, deploy, and orchestrate machine learning models tailored to specific business needs—from predictive maintenance to customer sentiment analysis



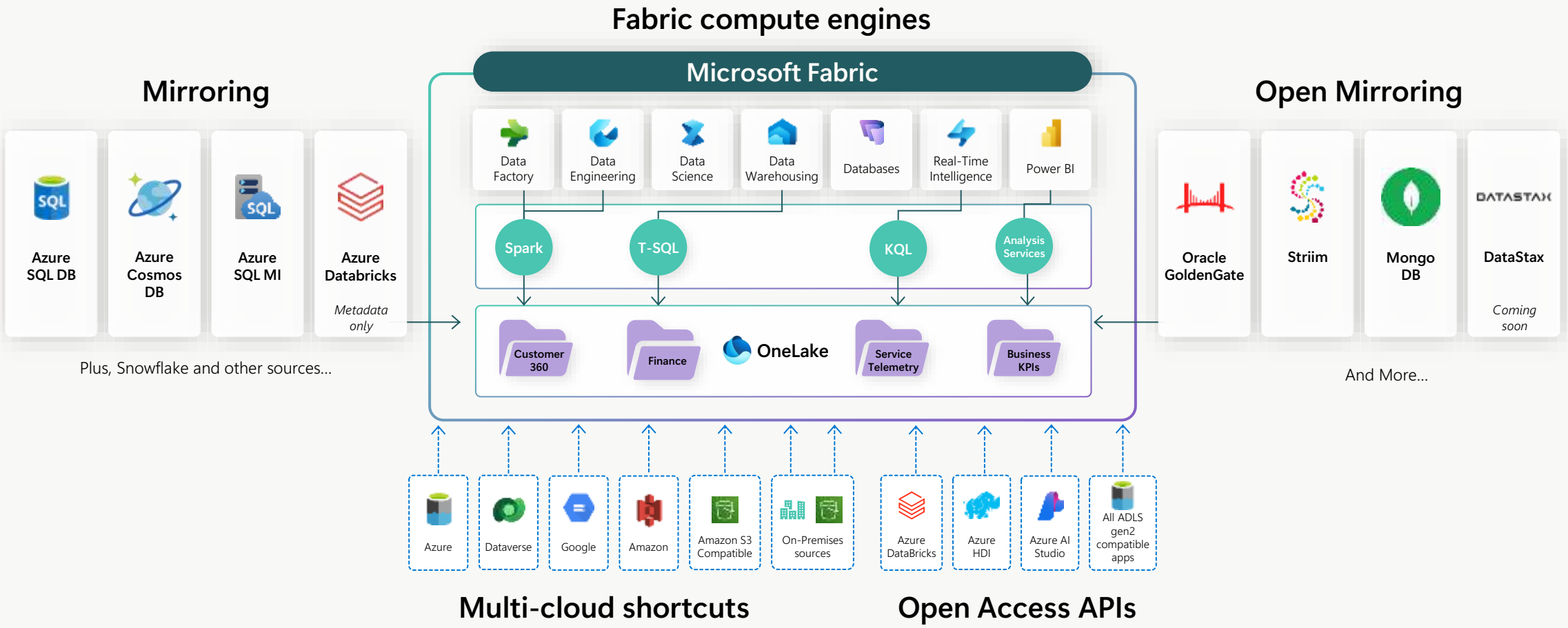
OneLake serves as the connective tissue to build generative AI apps powered by your data

Fuel your journey to AI innovation by getting your data AI ready

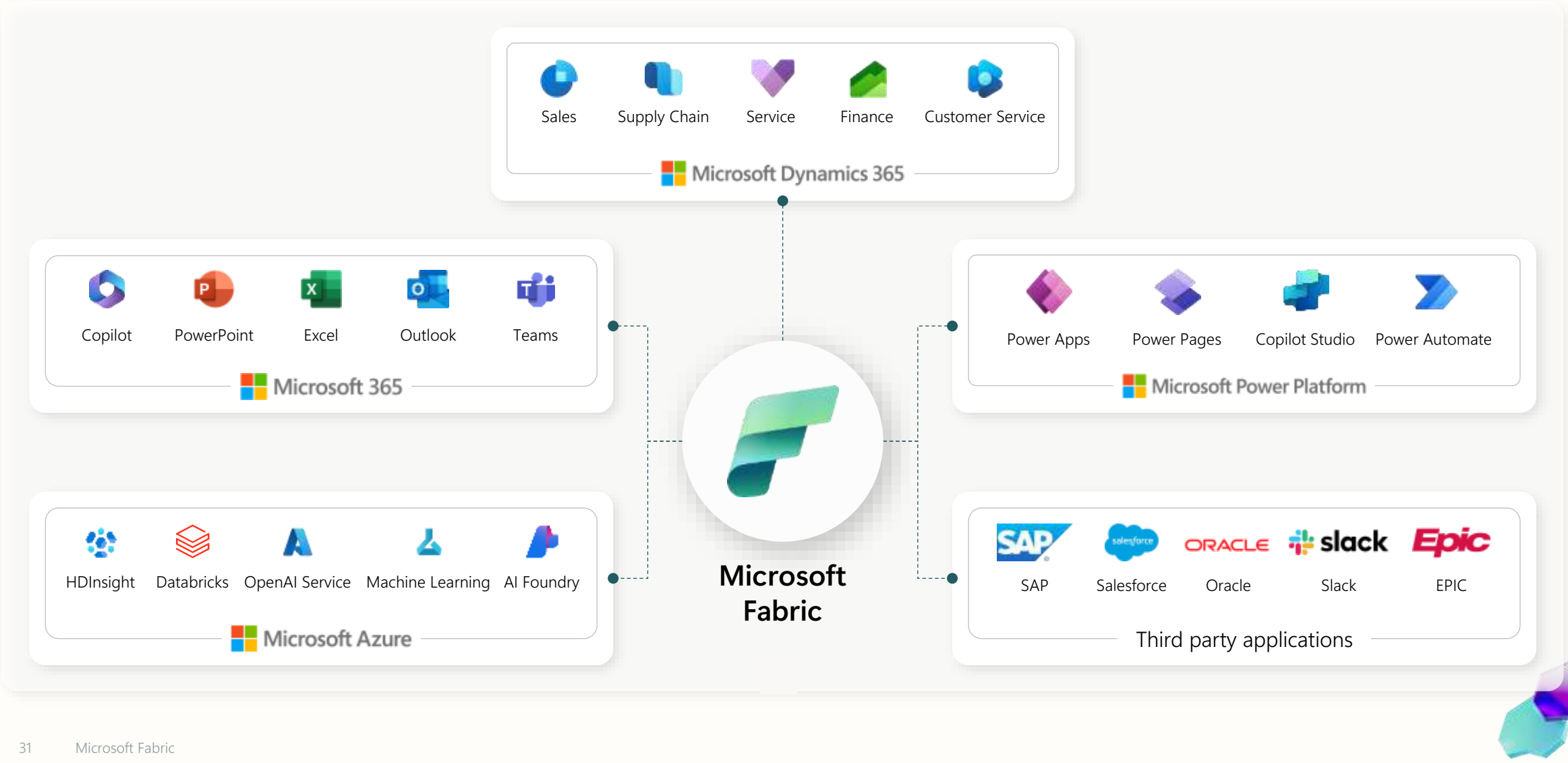


Microsoft Fabric integrates with your existing stack

Bring in data from anywhere



Put your insights into the hands of your people



All while ensuring your data is secure and governed

Informatica

Collibra

Alation

Microsoft Purview

atlan

In-house governance

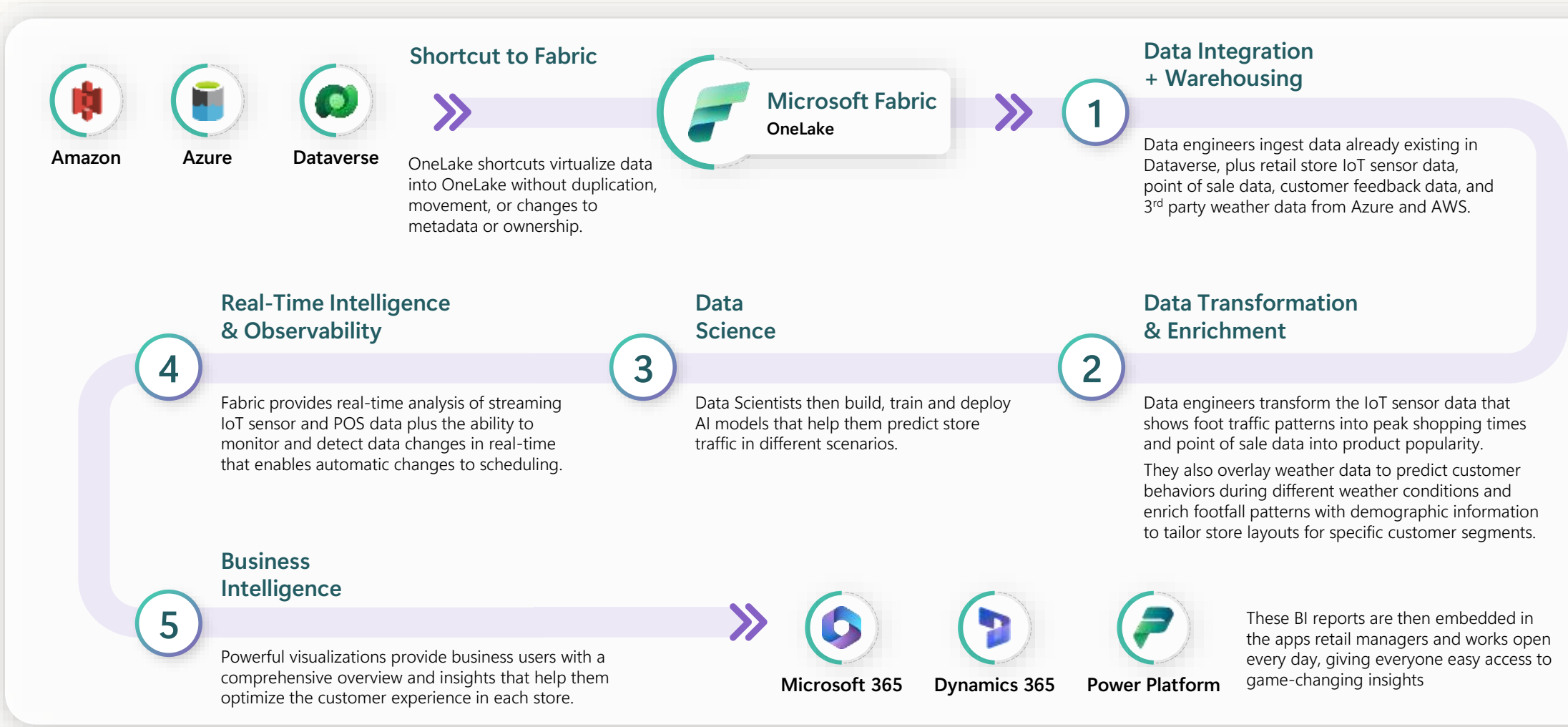
Industry-leading security & governance built-in

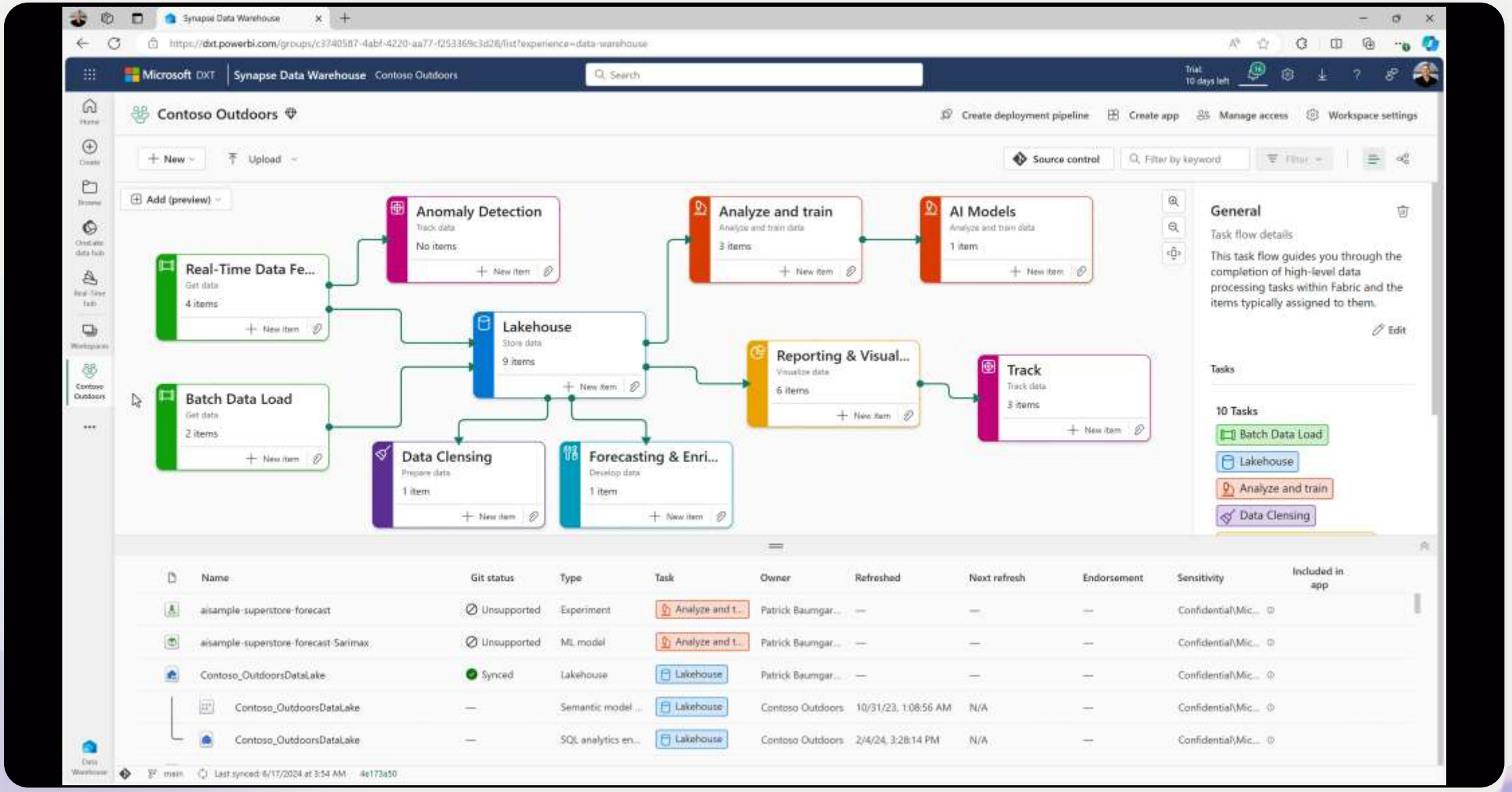
Microsoft Azure

Illustrative example

An illustrative retail example

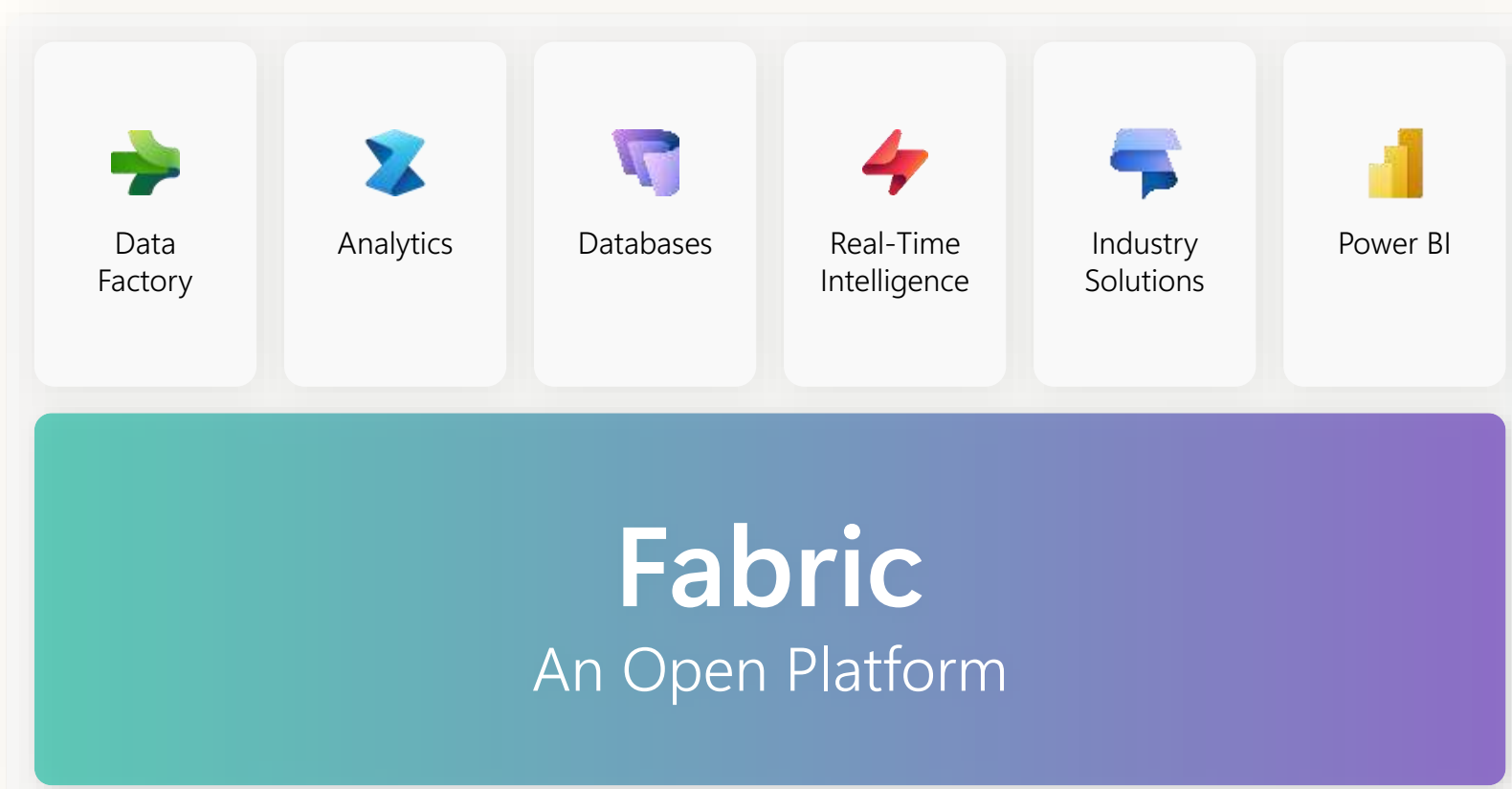
Microsoft Fabric workloads in action




Synapse Data Warehouse
Microsoft DXT
Synapse Data Warehouse
Contoso Outdoors
Search
Contoso Outdoors
Create deployment pipeline
Create app
Manage access
Workspace settings
New
Upload
Source control
Filter by keyword
Add (preview)
Anomaly Detection
Track data
No items
Analyze and train
Analyze and train data
3 items
AI Models
Analyze and train data
1 item
Real-Time Data Fe...
Get data
4 items
Lakehouse
Store data
9 items
Reporting & Visual...
Visualize data
6 items
Track
Track data
3 items
Batch Data Load
Get data
2 items
Data Clensing
Prepare data
1 item
Forecasting & Enri...
Develop data
1 item
General
Task flow details
This task flow guides you through the completion of high-level data processing tasks within Fabric and the items typically assigned to them.
Edit
Tasks
10 Tasks
Batch Data Load
Lakehouse
Analyze and train
Data Clensing
Name
Git status
Type
Task
Owner
Refreshed
Next refresh
Endorsement
Sensitivity
Included in app
aisample-superstore-forecast
Unsupported
Experiment
Patrick Baumgar...
Confidential\Mic...
aisample-superstore-forecast-Sarimax
Unsupported
ML model
Contoso_OutdoorsDataLake
Synced
Lakehouse
Contoso_OutdoorsDataLake
Semantic model ...
10/31/23, 1:08:56 AM
N/A
Contoso_OutdoorsDataLake
SQL analytics en...
2/4/24, 3:28:14 PM
main
Last synced: 6/17/2024 at 3:54 AM
4e173a50

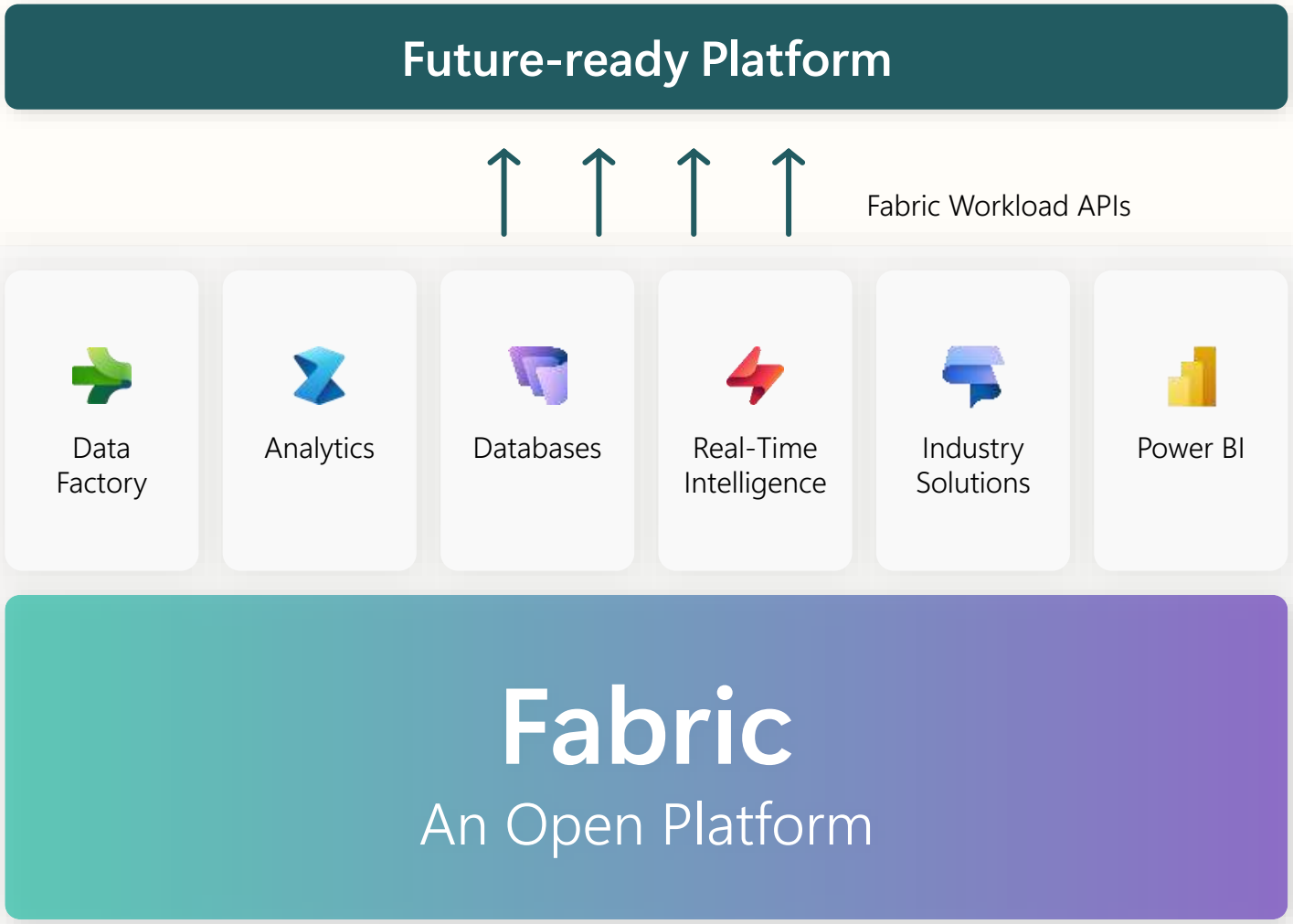
Extend Fabric with Microsoft Industry and ISV solutions

The Power of the Platform



- Open Formats
- Open Interfaces and APIs
- Open Platform

Build a future-ready platform with range of APIs



Popular Fabric APIs

- T-SQL Endpoints (GA)
- Kusto Query Language – KQL (GA)
- OneLake APIs (GA)
- GraphQL API (GA)
- User Data Functions Endpoint (Private Preview)

Microsoft Fabric ISV momentum

Public Preview

esri · Profisee · quantexa · teradata. · SAS · osmos

LSEG · NVIDIA · COGNITE · neo4j · AVEVA · Informatica

Adobe · Epic · Fivetran · Holistic AI · data iku · KANTAR

NetApp · MINIO · ORACLE · Qlik · snowflake · Schneider Electric

ASTRONOMER · MongoDB. · PowerBI.tips · STATSIG · striim · DATASTAX

And many more!

Accelerate the transformation of your data into business value with Industry solutions in Microsoft Fabric.

Accelerate the transformation of your data into business value with Industry solutions in Microsoft Fabric

Unify your data through connectors built for industry needs and regulations.

Harmonize and enrich your industry-specific data.

Activate industry scenarios with purpose-built solutions.

Accelerate the transformation of your data into business value with Industry solutions in Microsoft Fabric

Unify your data through connectors built for industry needs and regulations.

Bring disparate data together into a single source of truth with easily-configurable connectors that comply with key industry regulations, standards, and requirements.

Harmonize and enrich your industry-specific data.

Enrich data with industry-specific context and meaning, making it more valuable to data-intensive AI solutions.

Activate industry scenarios with purpose-built solutions.

Deliver solutions that matter to your industry by leveraging turnkey, purpose-built AI and analytics templates and models.

Introducing Industry solutions in Microsoft Fabric

Industry tailored capabilities immediately accessible in Microsoft Fabric

Featuring connectors, data models, and solutions purpose-built for specific industries to accelerate the transformation of data into business value.

Sustainability

Use ESG optimized data lakes, prebuilt notebooks, and dashboards to ingest, process, aggregate, and display data for various ESG scenarios.

Healthcare

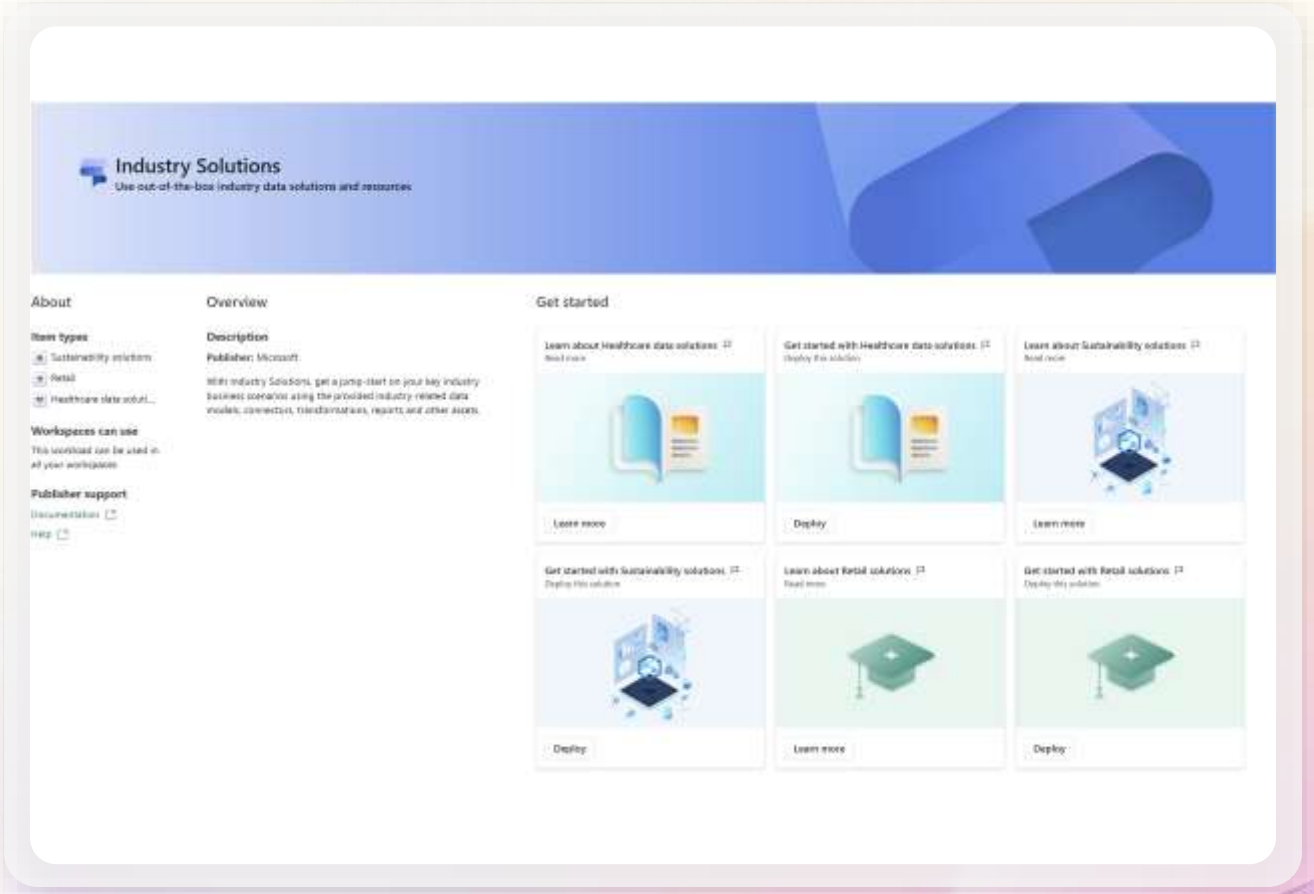
Unify data with healthcare connectors (FHIR, HIPAA and DICOM compliant) and BI for unstructured clinical notes, and data prep (OMOP compliant).

Retail

Take advantage of retail-specific data, connectors, app templates, and BI, such as the Frequently-Bought-Together model.

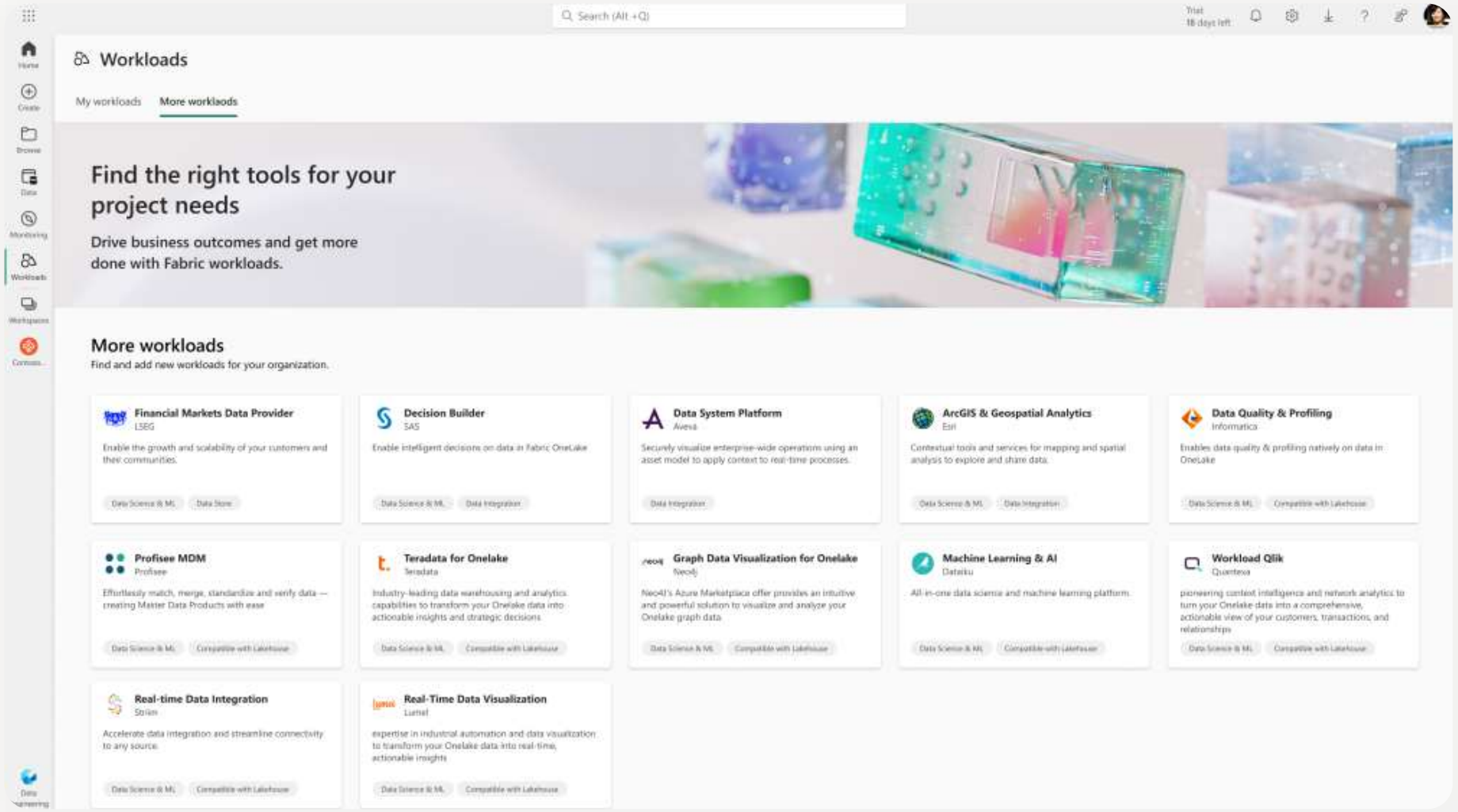
Manufacturing (private preview)

Unify OT and IT data and enrich with manufacturing data model (ISA-95) and built AI apps with copilot templates.



Microsoft internal only – do not share

Extend further with partner-developed workloads on Fabric



AVEVA

sas

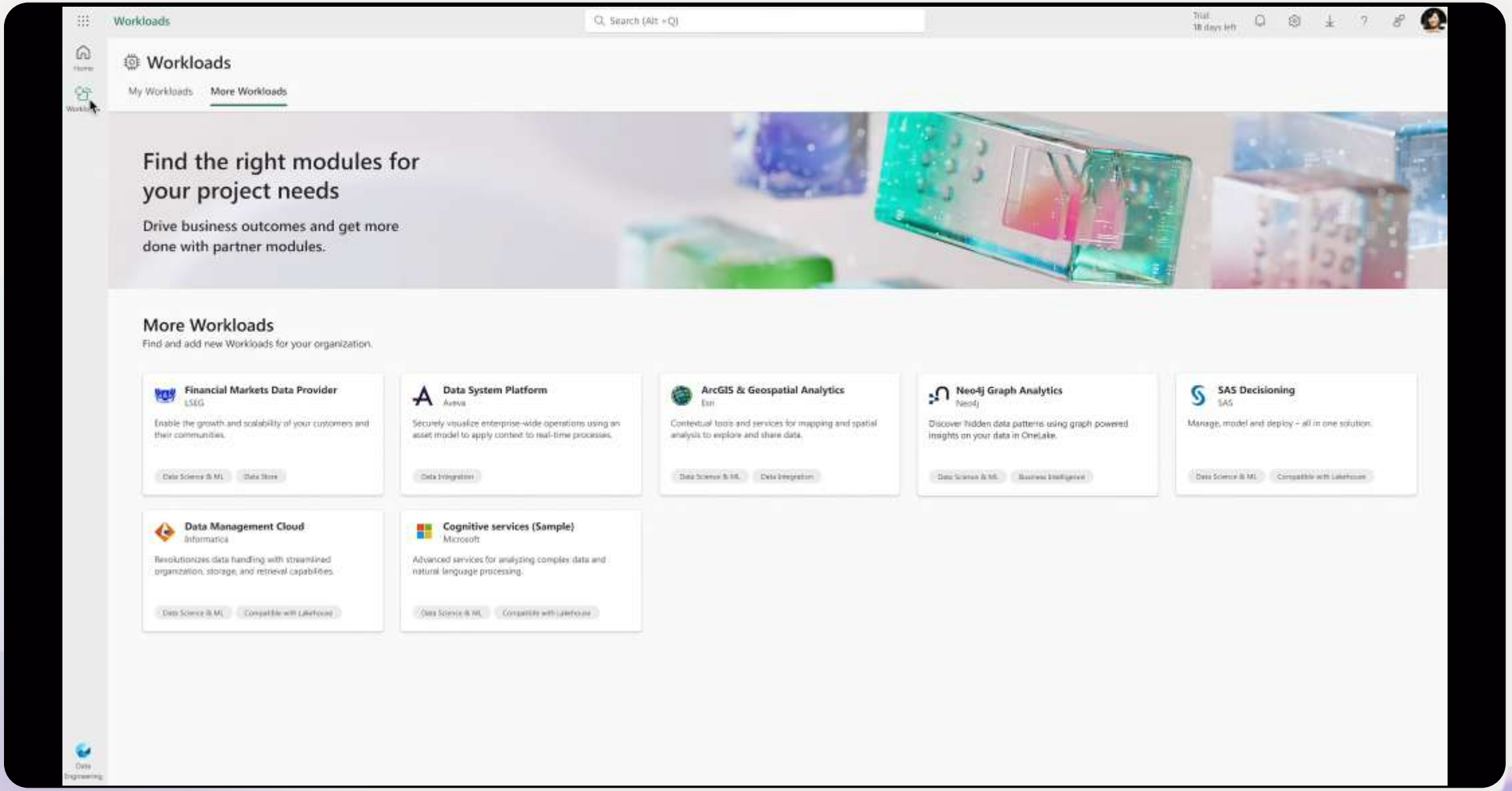
Profisee

Informatica

LSEG

esri

teradata.


Workloads
Search (Alt +Q)
Trial:
18 days left
Workloads
My Workloads
More Workloads
Find the right modules for your project needs
Drive business outcomes and get more done with partner modules.
More Workloads
Find and add new Workloads for your organization.
Financial Markets Data Provider
LSEG
Enable the growth and scalability of your customers and their communities.
Data Science & ML
Data Store
Data System Platform
Aveva
Securely visualize enterprise-wide operations using an asset model to apply context to real-time processes.
Data Integration
ArcGIS & Geospatial Analytics
Esri
Contextual tools and services for mapping and spatial analysis to explore and share data.
Data Science & ML
Data Integration
Neo4j Graph Analytics
Neo4j
Discover hidden data patterns using graph powered insights on your data in OneLake.
Data Science & ML
Business Intelligence
SAS Decisioning
SAS
Manage, model and deploy – all in one solution.
Data Science & ML
Compatible with Lakehouse
Data Management Cloud
Informatica
Revolutionizes data handling with streamlined organization, storage, and retrieval capabilities.
Data Science & ML
Compatible with Lakehouse
Cognitive services (Sample)
Microsoft
Advanced services for analyzing complex data and natural language processing.
Data Science & ML
Compatible with Lakehouse
Data Engineering

Microsoft

Thank you