

# Azure Synapse Analytics Service



Azure  
Synapse  
Analytics

# Introduction

Why Warehousing in Cloud

Azure Synapse Service – a Game Changer

Traditional vs Modern DW Architecture

Modern vs Synapse DW Architecture

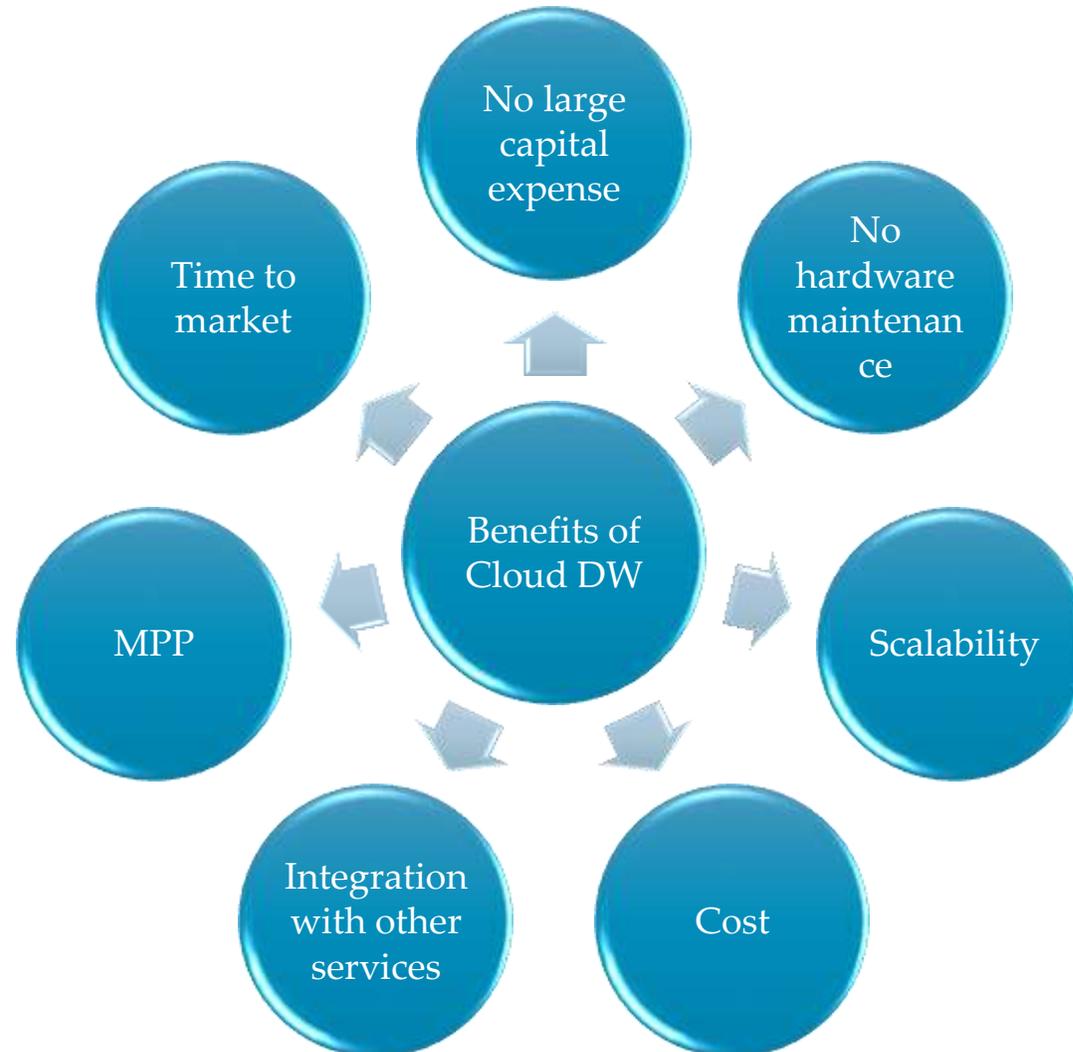
Azure Synapse Studio – Unified Experience

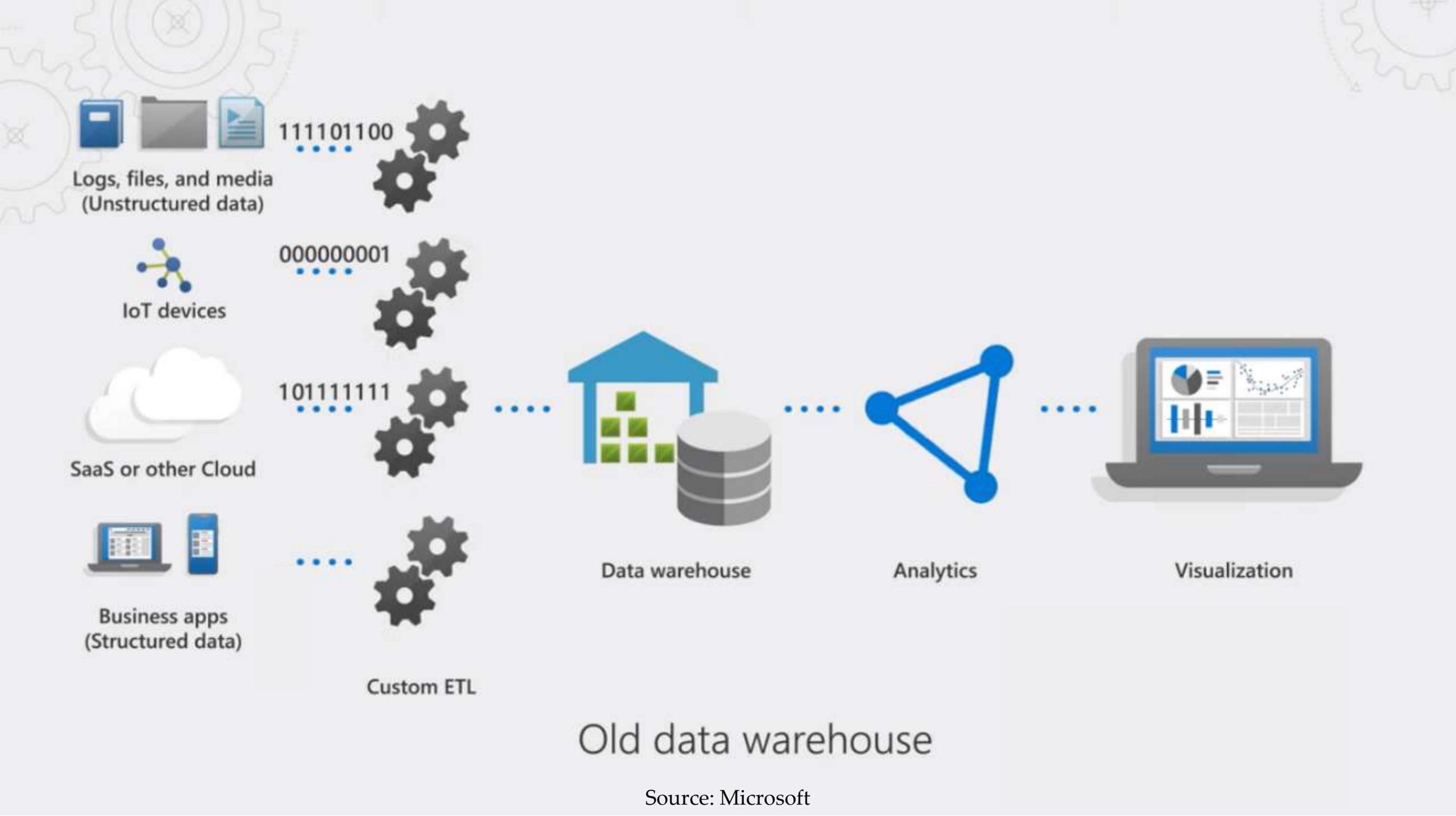
Demo – Provision, Scale, Pause, Firewall settings



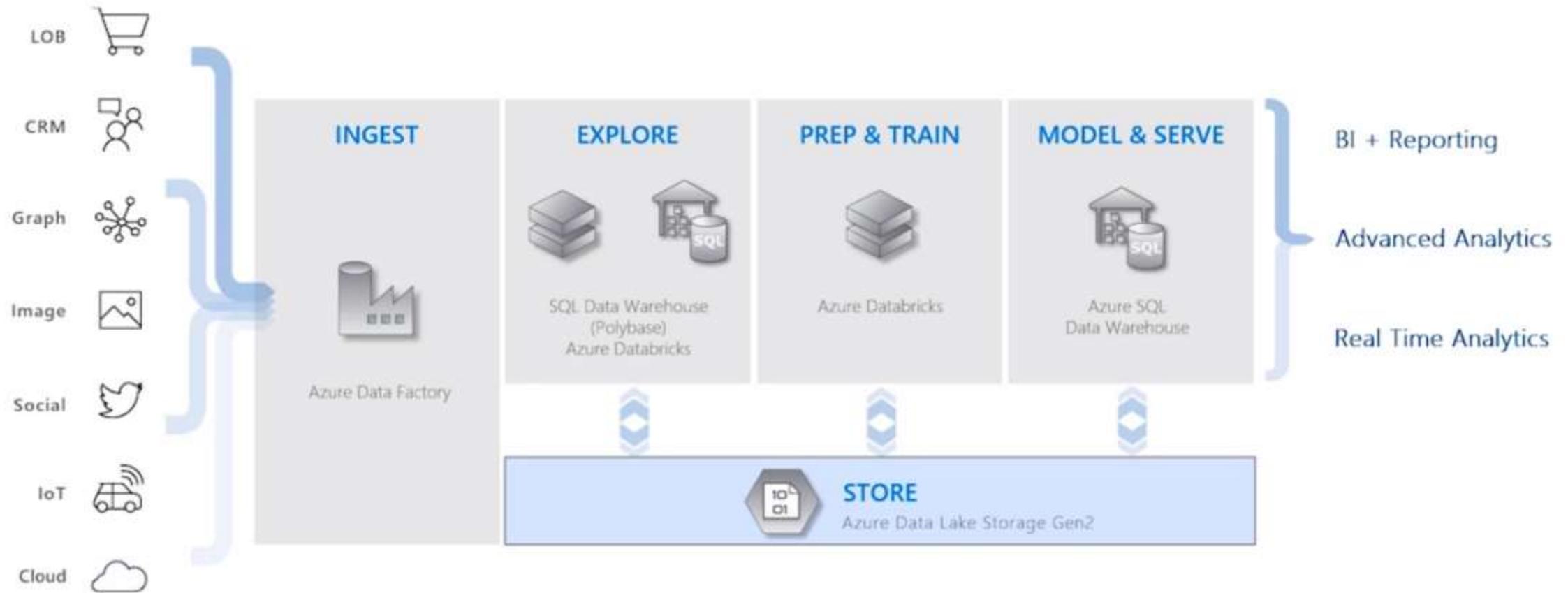
Azure  
Synapse  
Analytics

# Why Warehousing in Cloud?

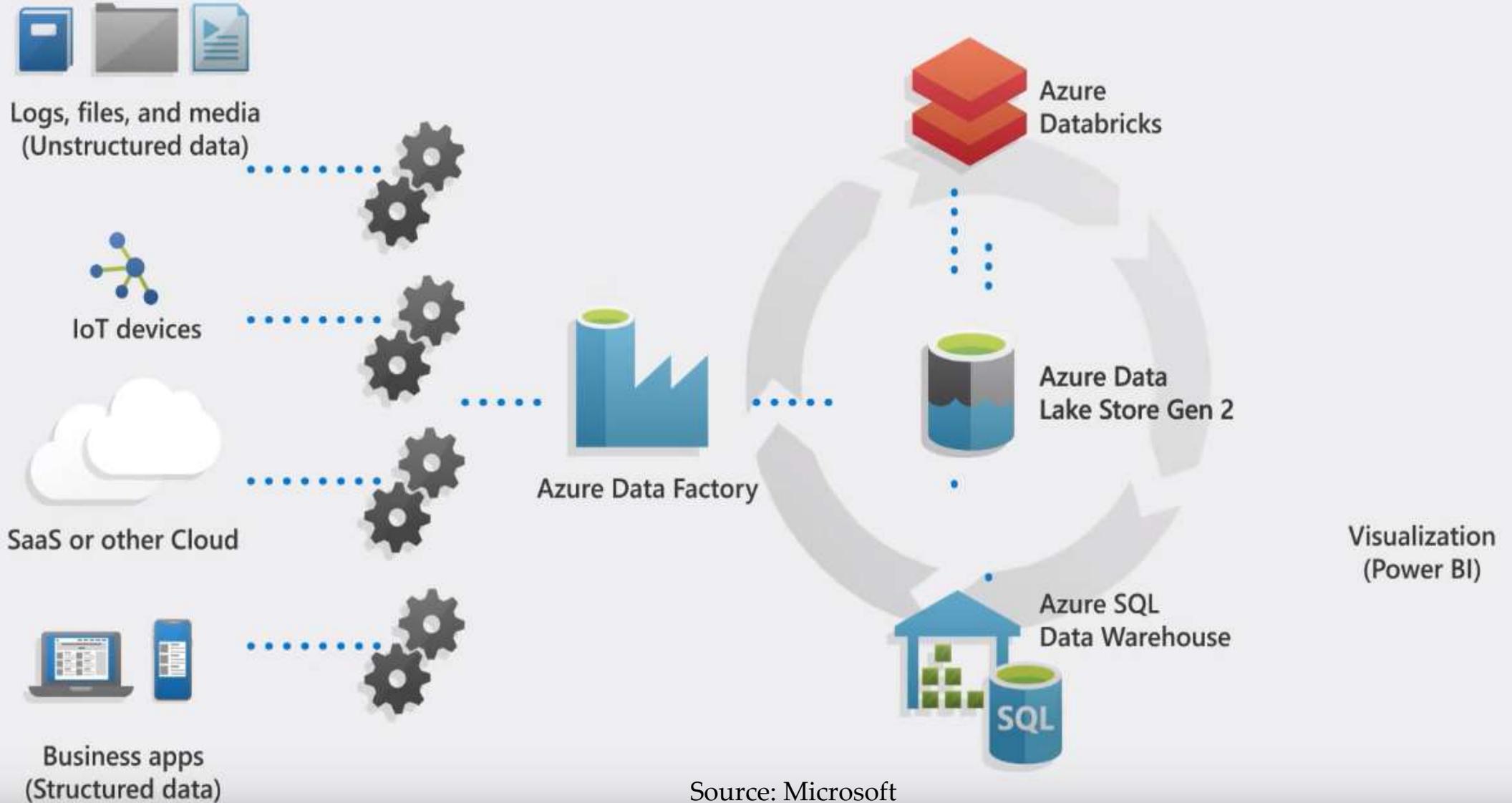




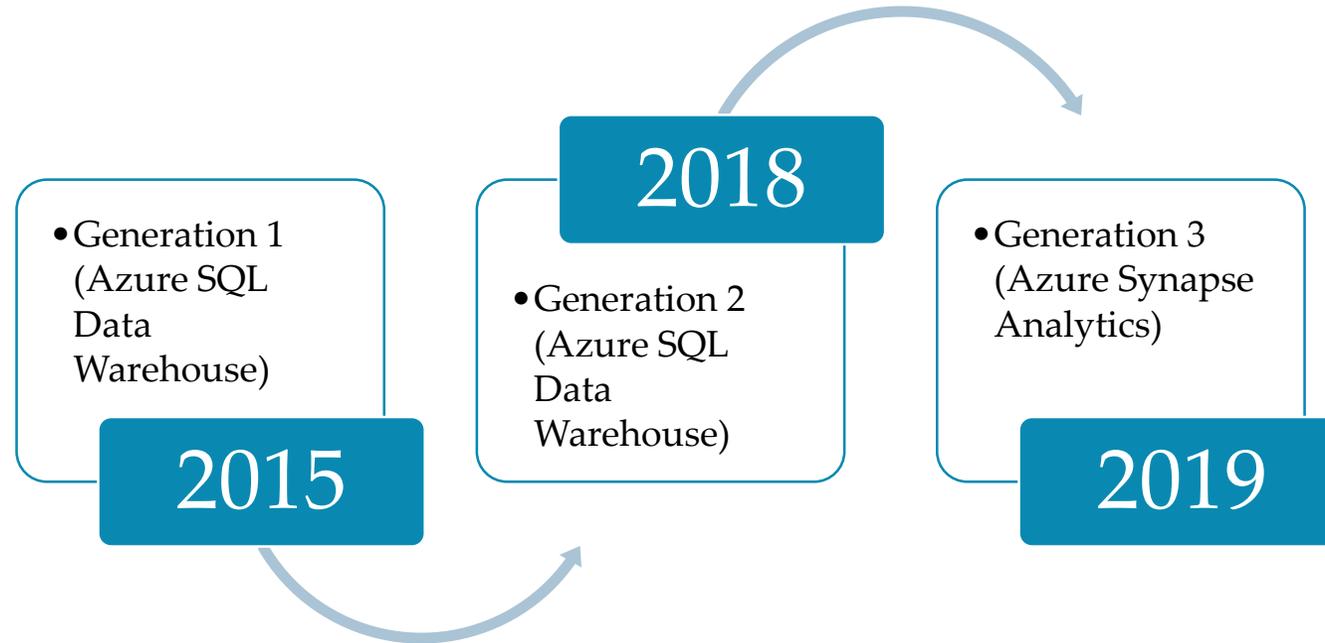
# Modern Data Warehousing



# Modern Data Warehouse



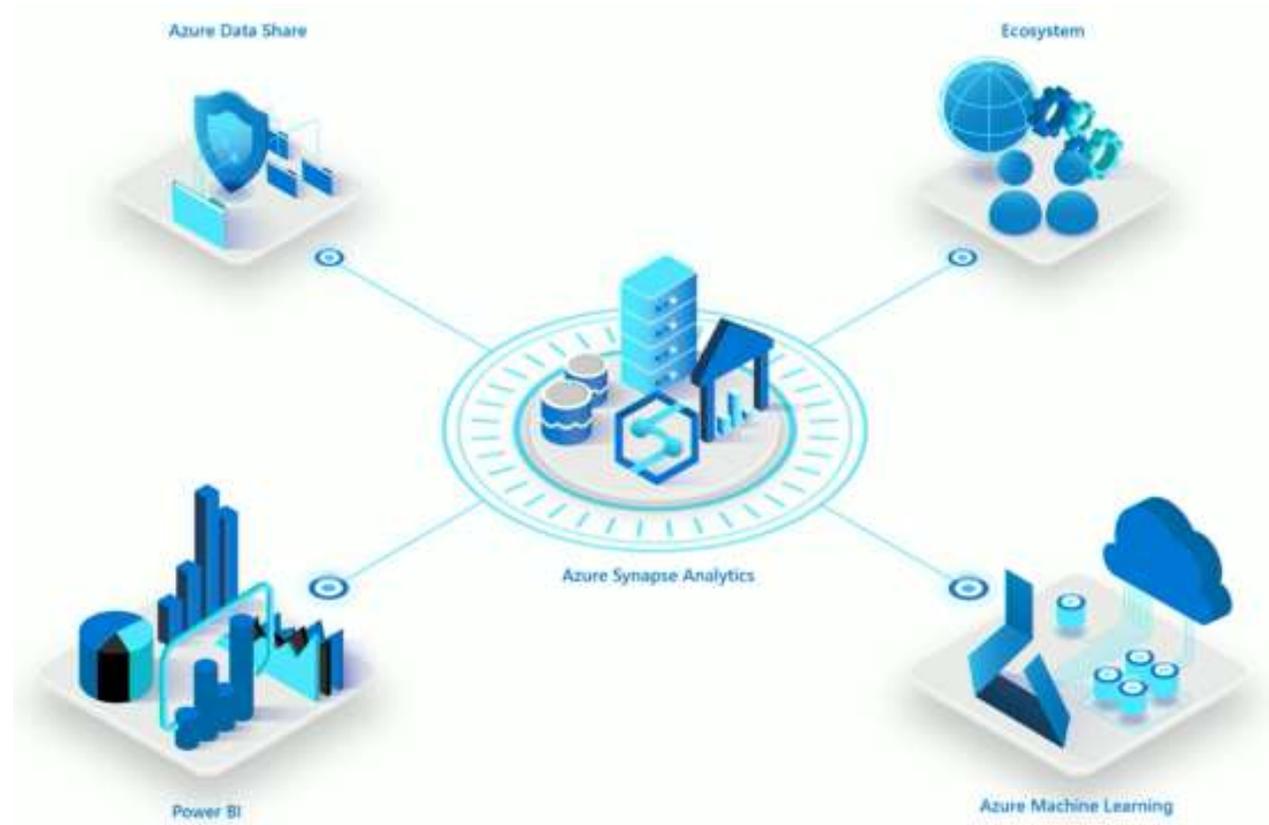
# Azure SQL Data warehouse



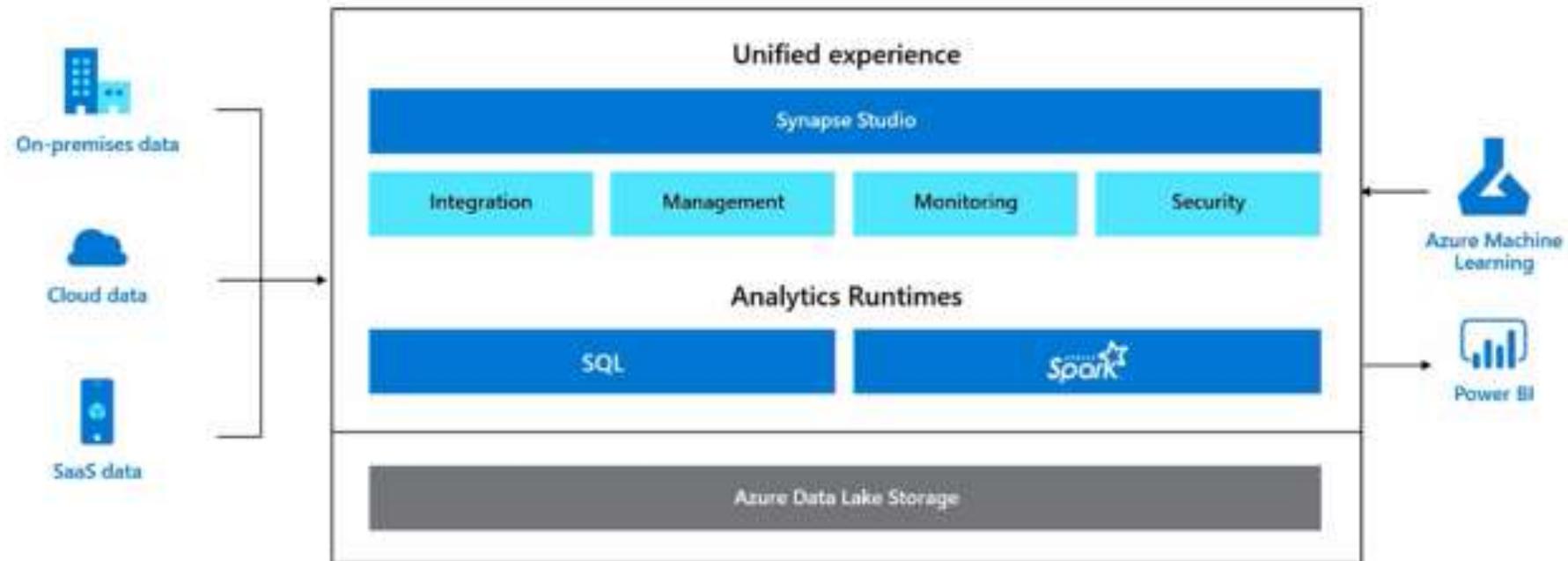
# Azure Synapse Analytics

*"Synapse is the next generation of Azure SQL Data Warehouse, blending big data analytics, data warehousing, and data integration into a single unified service that provides end-to-end analytics with limitless scale."*

# Azure Synapse Analytics



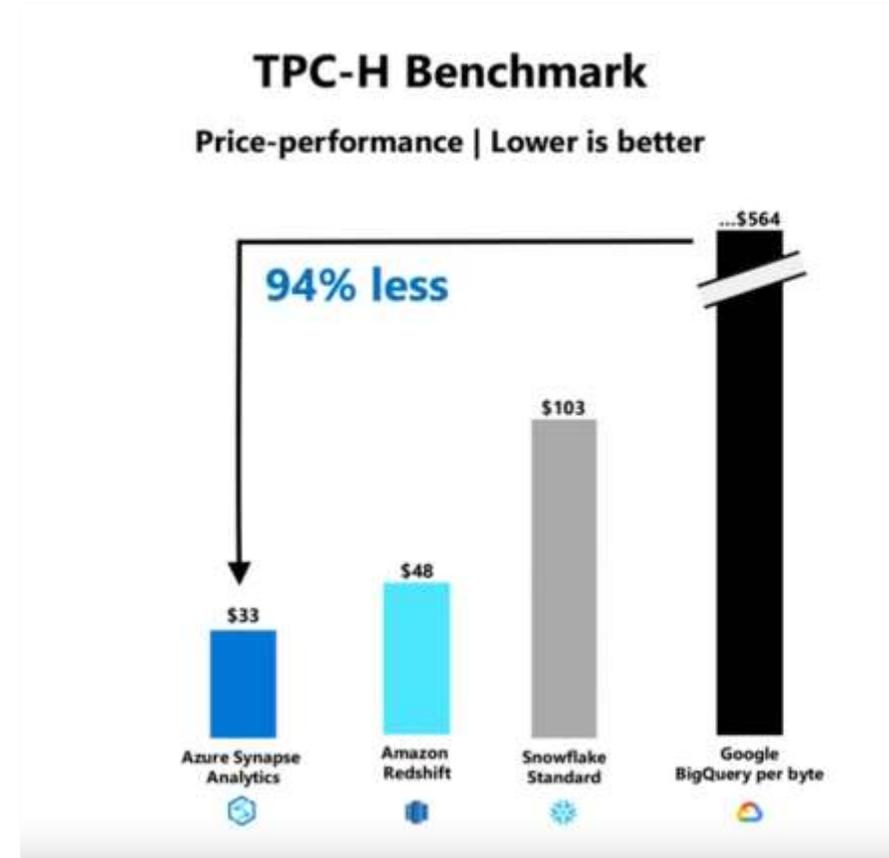
# Azure Synapse Analytics



# Unparalleled price-performance

Up to 14x faster

Costs 94% less than other cloud providers



# Azure Synapse



Structured and  
unstructured data



Data warehousing and  
big data analytics



Cloud-native

# Azure Synapse Analytics



Limitless Scale



Powerful Insight



Unified Experience



Security

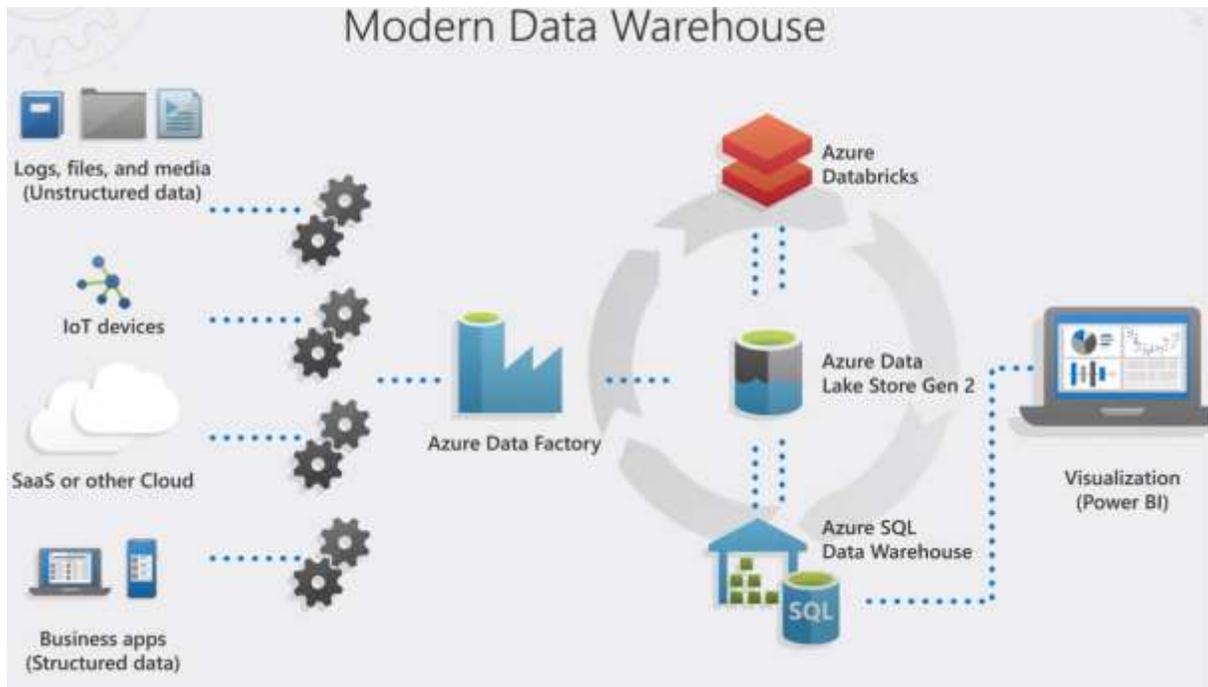


Code free data  
orchestration

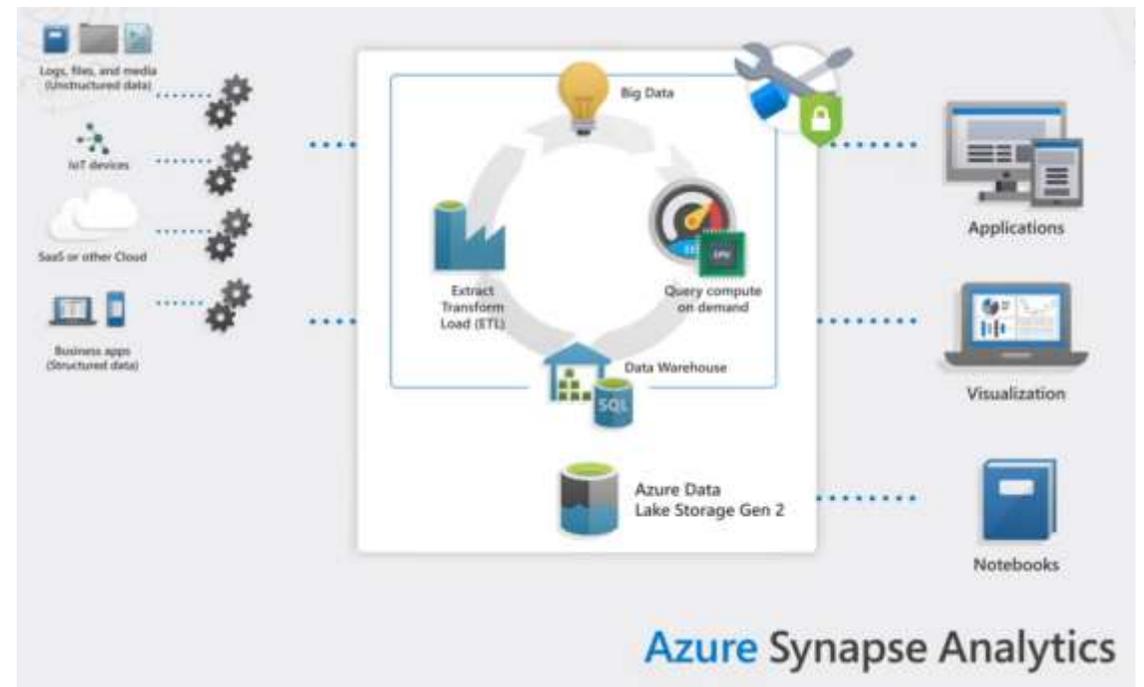


Choice of Language

# Modern vs Synapse Architecture



Modern Data Warehouse Architecture



Synapse Analytics Architecture



Logs, files, and media  
(Unstructured data)



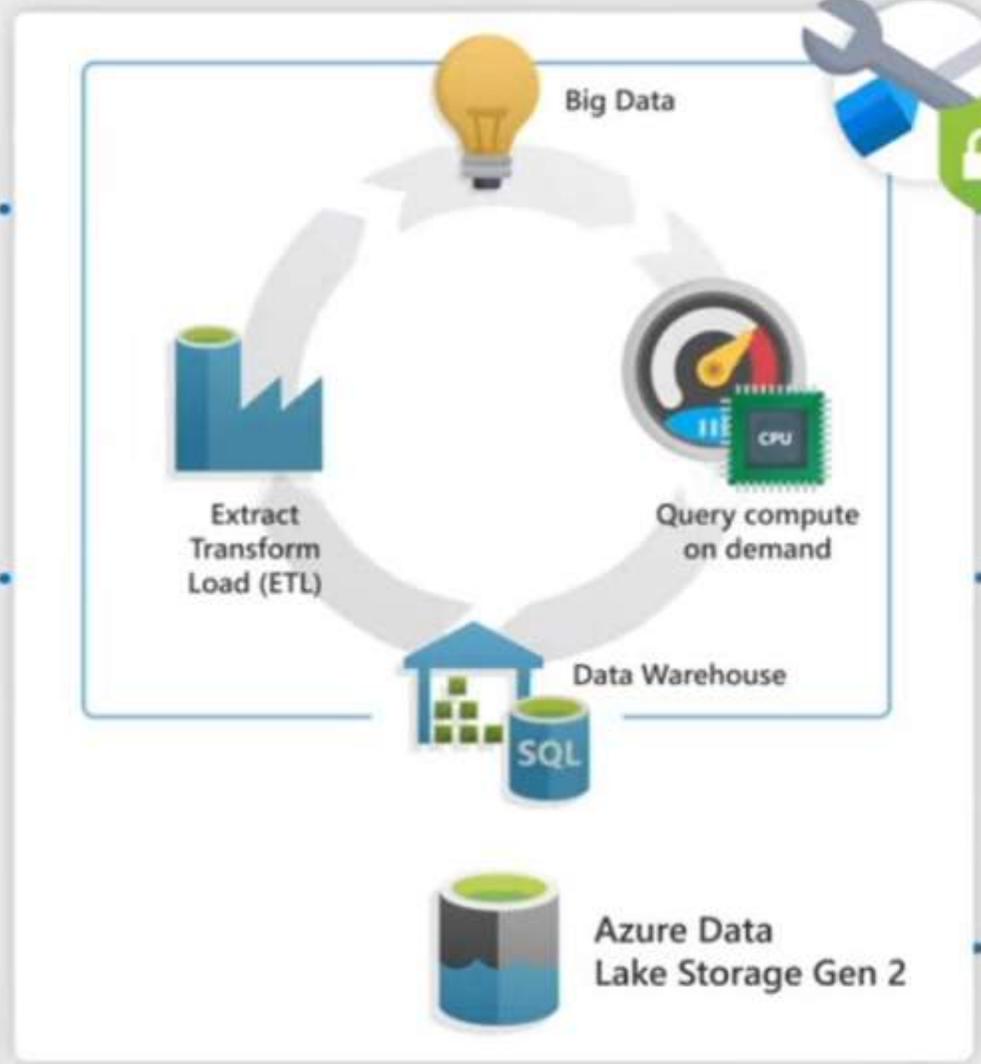
IoT devices



SaaS or other Cloud



Business apps  
(Structured data)



Applications

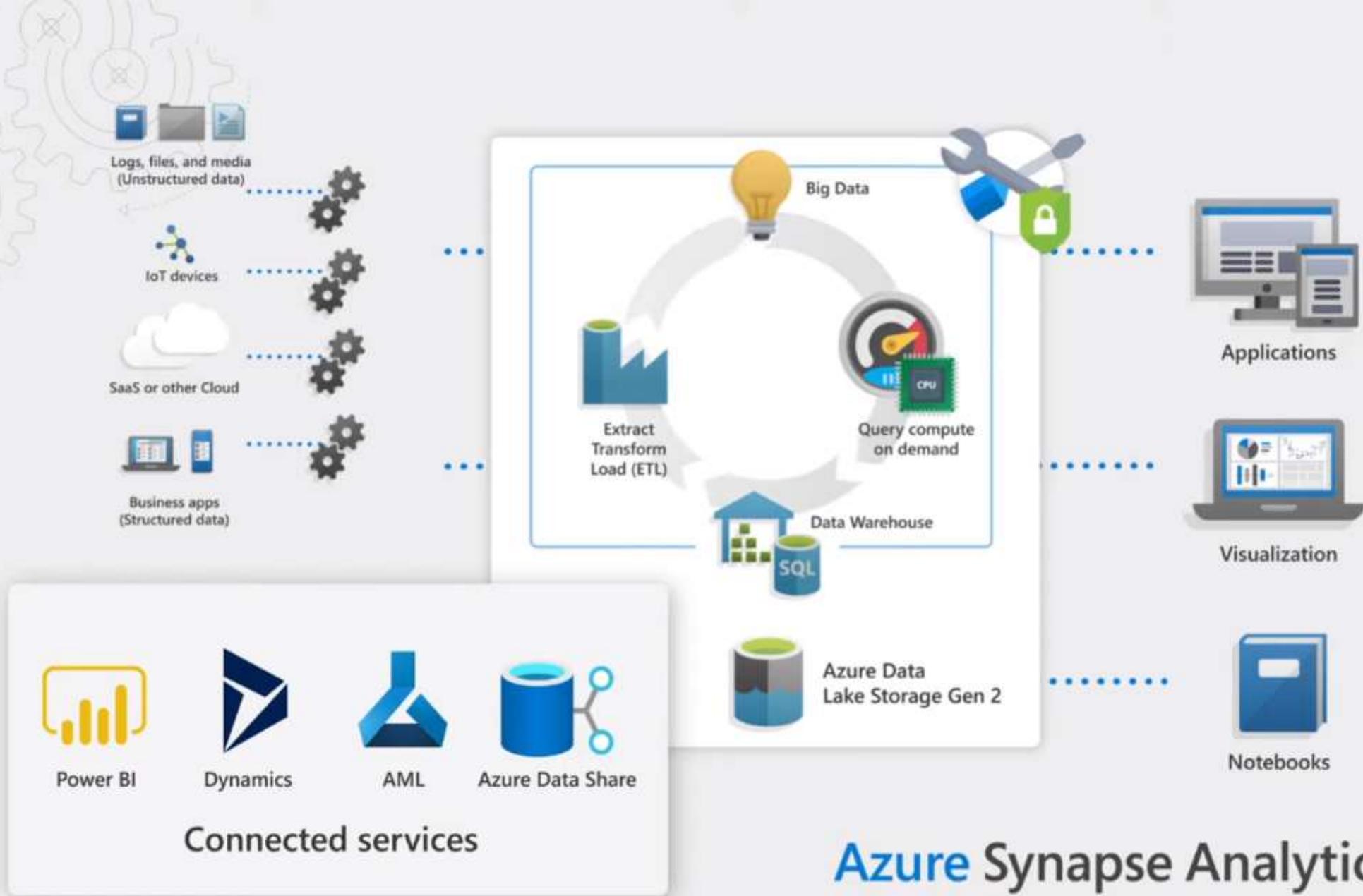


Visualization



Notebooks

# Azure Synapse Analytics



# Azure Synapse Analytics

# Azure Synapse Analytics



## On-premises data

Oracle, SQL, Teradata, fileshares, SAP



## Cloud data

Azure, AWS, GCP



## SaaS data

Salesforce, Dynamics



# Azure Synapse Analytics

## STORE

Azure Data Lake Storage

## VISUALIZE



Power BI

# Demo – Provision Azure Synapse Service

1. Create SQL Server
2. Create Synapse SQL Pool (Azure SQL Data Warehouse)
3. Pause/Resume Compute Node
4. Create Firewall Rule
5. Connect with Microsoft SQL Server Management Studio



Azure  
Synapse  
Analytics

# Azure Synapse Studio



Azure  
Synapse  
Analytics



# Synapse workspace contosodemo

New ▾



**Ingest**  
Use the copy data tool to import data once or on a schedule.

**Explore** 🔗  
Learn how to navigate and interact with your data.

**Analyze** 🔗  
Learn how to use SQL or Spark to get insights from your data.

**Visualize**  
Build interactive reports with integrated Power BI capabilities.

## Resources

Recent   Pinned

| NAME                             | LAST OPENED BY YOU |
|----------------------------------|--------------------|
| <a href="#">AMLautoMLPredict</a> | a minute ago       |
| <a href="#">PrepTaxiData</a>     | a minute ago       |
| <a href="#">DWSQLQuery1</a>      | 2 minutes ago      |
| <a href="#">ondemandSQLQuery</a> |                    |

Source: Microsoft

## Useful links

[Synapse Analytics overview](#) 🔗  
Discover the capabilities offered by Synapse and learn how to make the most of them.

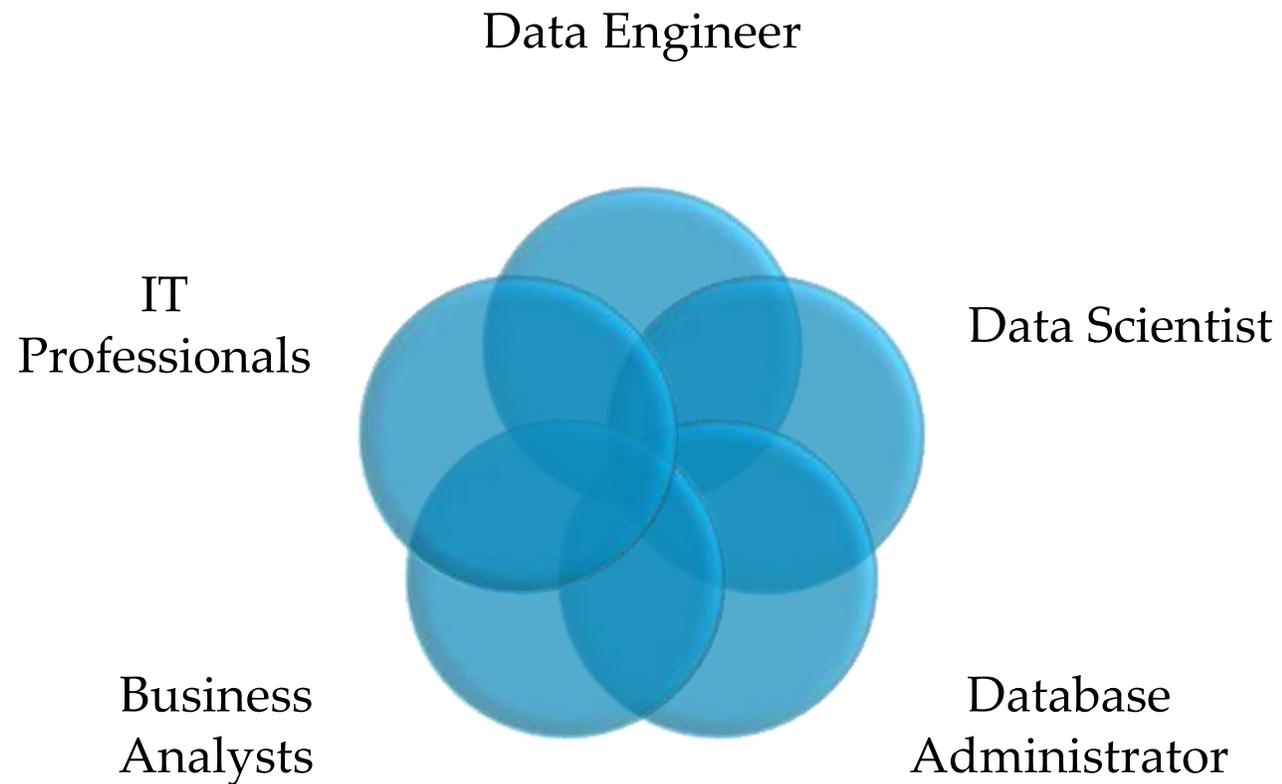
[Pricing](#) 🔗  
Learn about pricing details for Synapse capabilities.

[Documentation](#) 🔗  
Visit the documentation center for quickstarts, how-to guides, and references for PowerShell, APIs, etc.

[Give feedback](#) 🔗  
Share your comments or suggestions with us to improve Synapse.

# Azure Synapse Analytics

Unified experience for all data professionals



# Summary

Advantages of Cloud Warehousing

Synapse Analytics - advantages

Why Synapse Analytics is Game changer in Cloud Analytics

Traditional vs Modern DW Architecture

Modern vs Synapse DW Architecture

Synapse Studio – Unified experience

Demo – Provision, Pause, Scale, Firewall settings etc.



**Azure  
Synapse  
Analytics**