

**AZURE SYNAPSE +
POWER BI + PURVIEW =
TRUE**

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twoday capacity



A SHORT HISTORY IN TWO ACTS:

Act 1: The Data Warehouse

Been around since 1988 (the Business Data Warehouse...)

Evolved over time

Three main approaches:

The Dimensional approach

The Normalized approach

The Data Vault

A SHORT HISTORY IN TWO ACTS:

Act 1: The Data Warehouse

High data quality and focus on exact numbers

«long» development life cycles

Relational databases struggle with «Big Data»

Strength:

«How are we doing?»

Enterprisewide reporting / cross domain

A SHORT HISTORY IN TWO ACTS:

Act 2: The Data Lake

Been around since 2011

answer to pains in EDW on the 3 Vs of big data (volume, variety, velocity)
or 4 or 5 Vs...

typical varieties are:

the raw data lake

the business data lake or layered data lake Ingen standardisering på tvers

Load «all» data

A SHORT HISTORY IN TWO ACTS:

Act 2: The Data Lake

Transformation happens in the upper layers

No normalization between source systems

Layered data lake gives different user groups different access in layers

Enables data science and self-service

Danger of data swamp (on-prem)

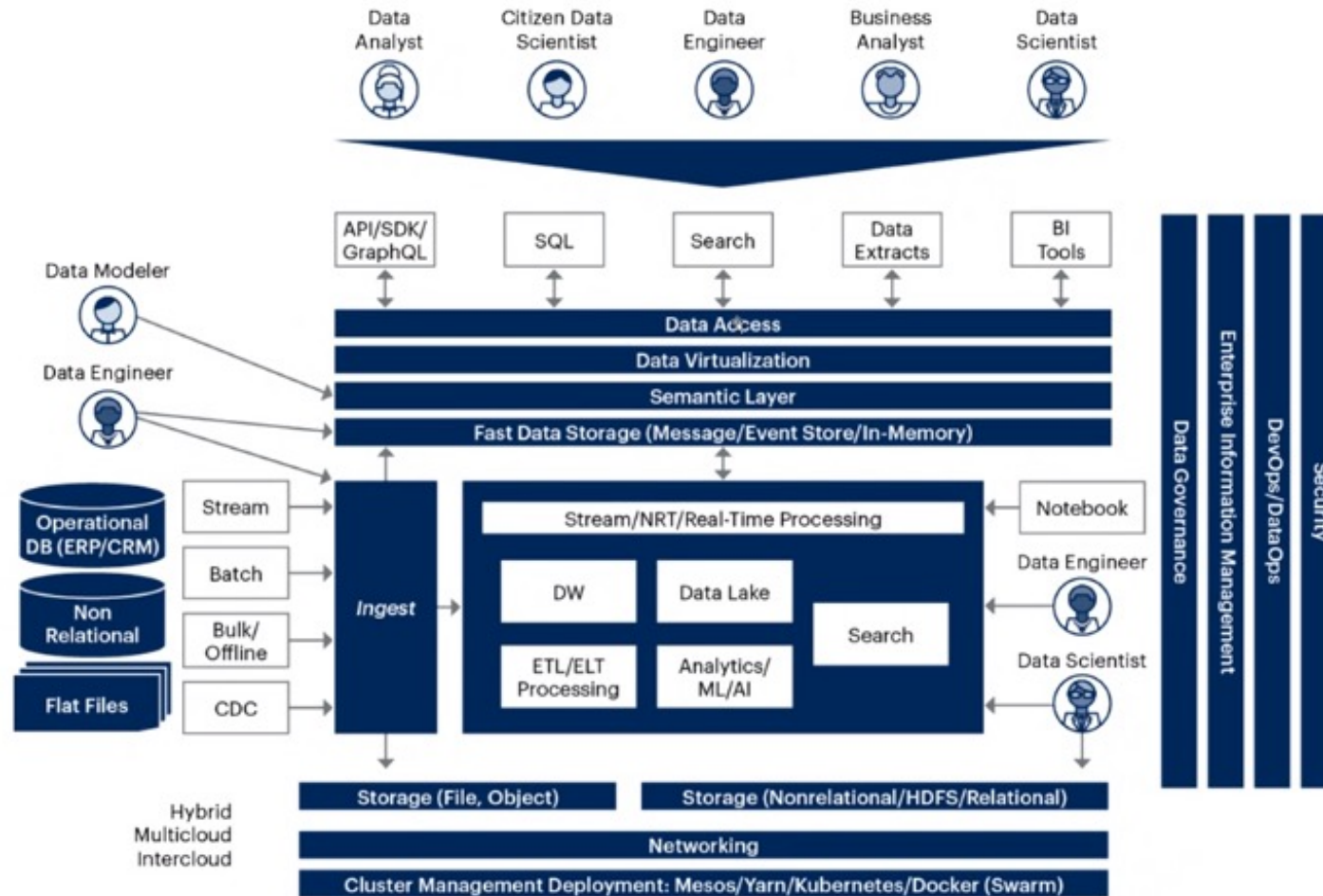
Strength:

Great for trends and ad-hoc analysis

Short time to market development cycles

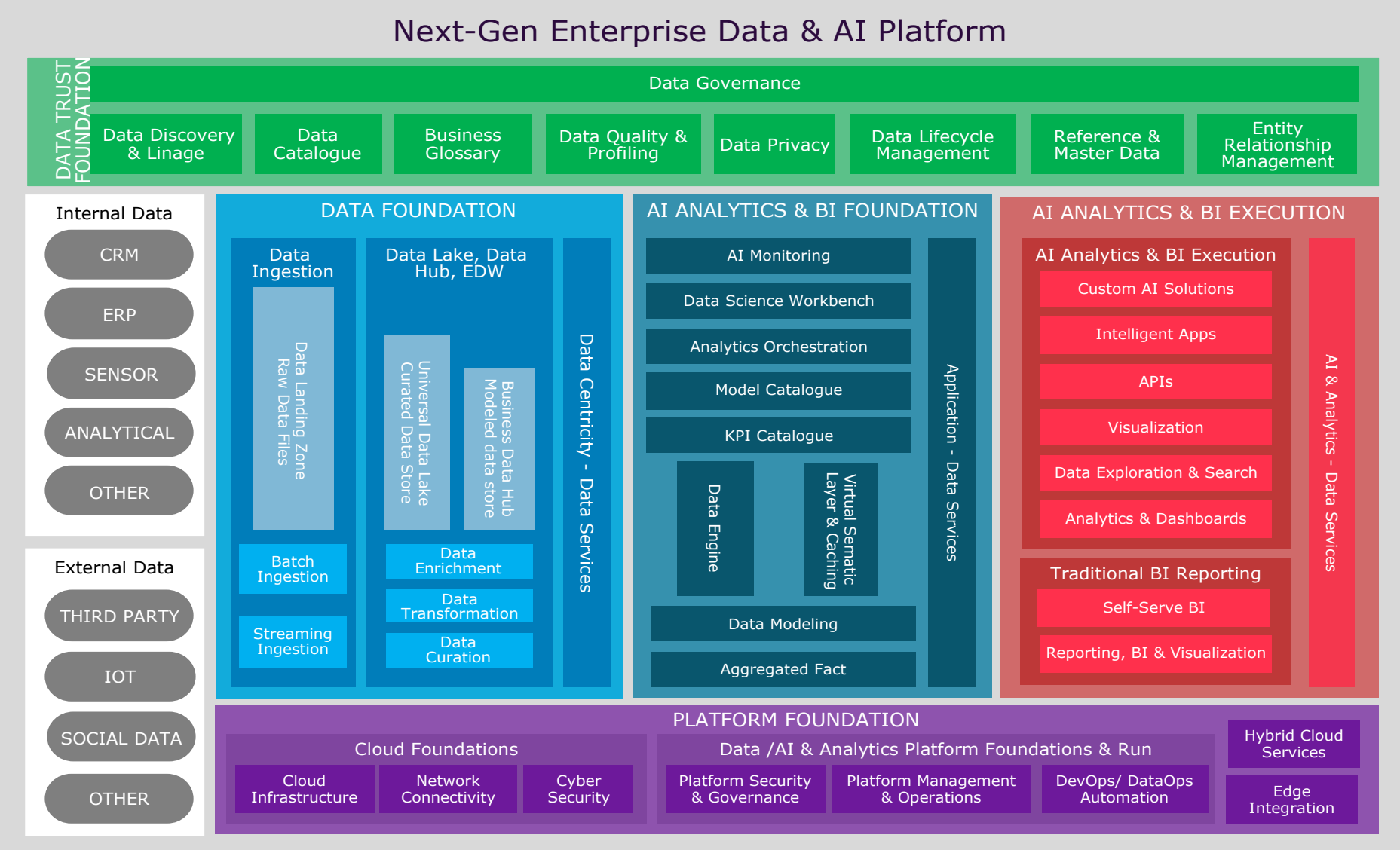
THE MODERN DATA LANDSCAPE

End-to-End Data and Analytics Reference Architecture

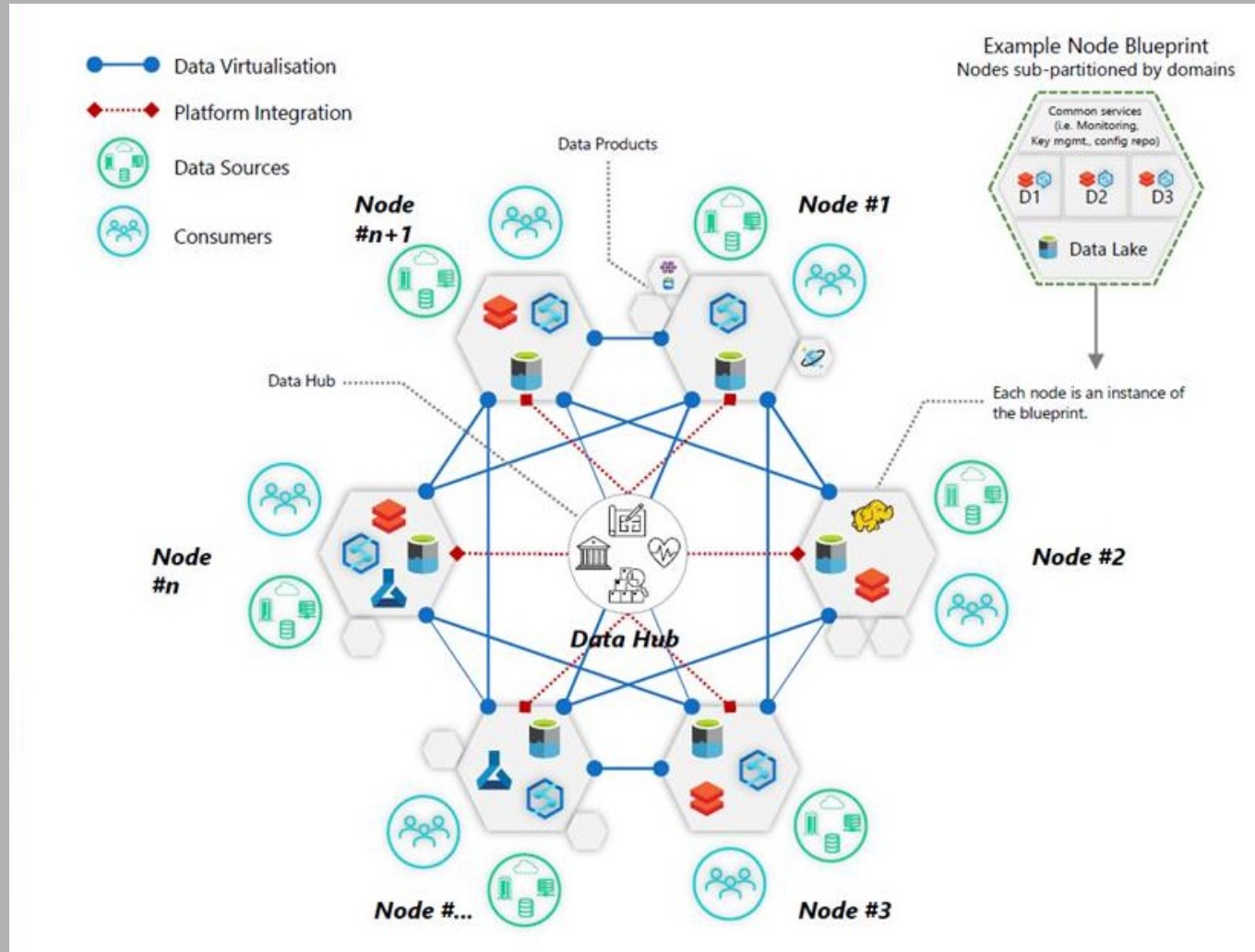


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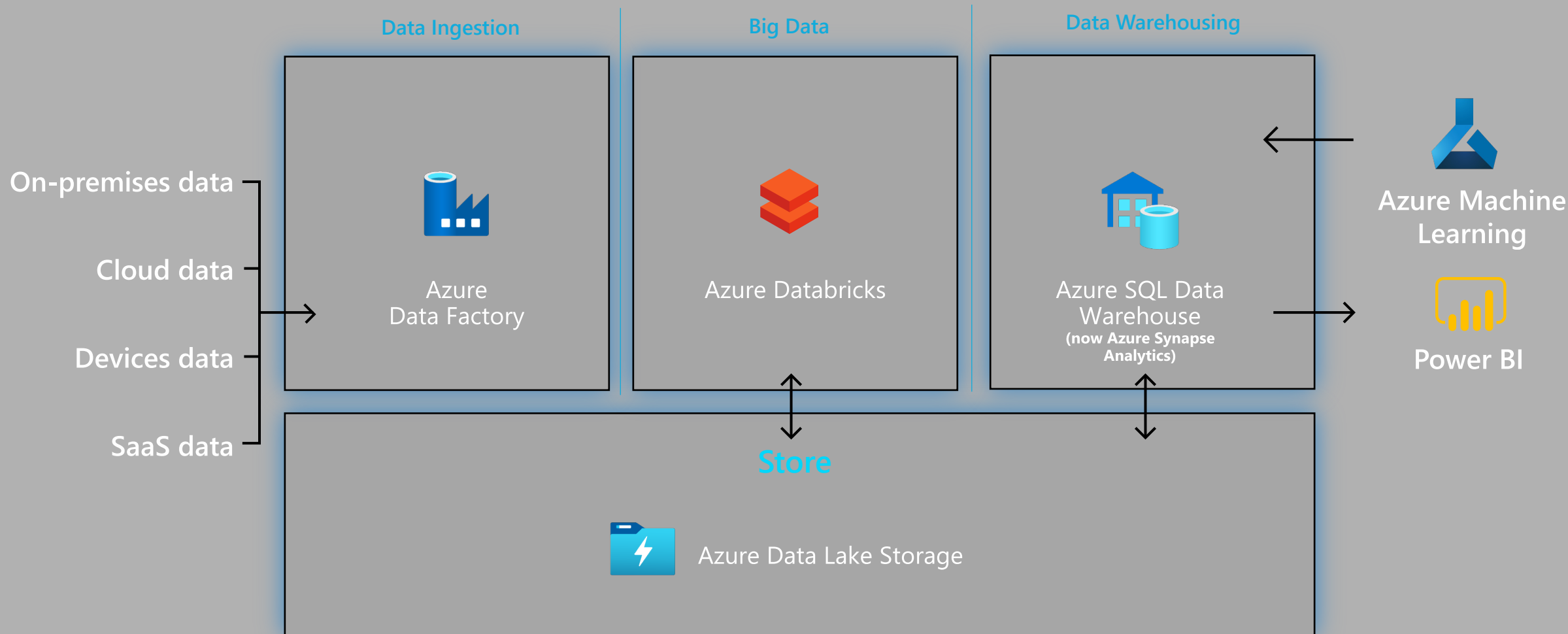
THE MODERN DATA LANDSCAPE



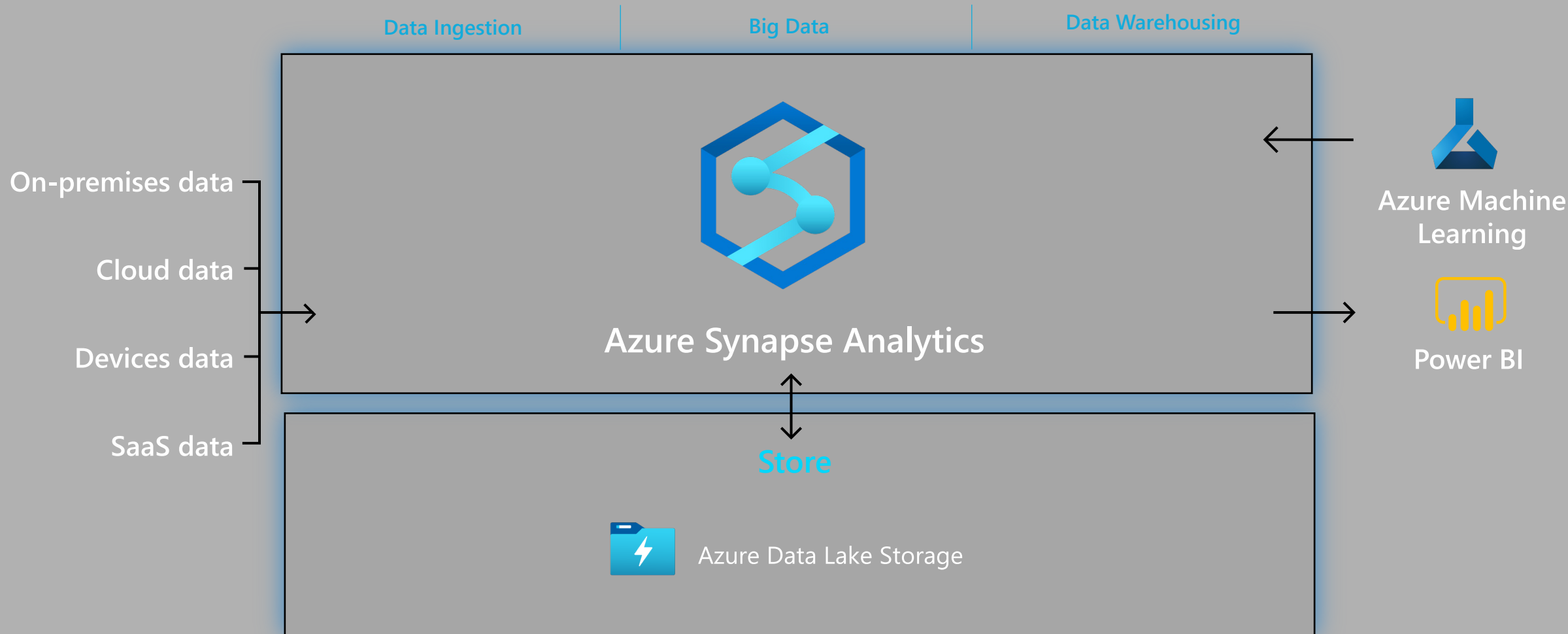
THE MODERN DATA LANDSCAPE



AZURE DATA PLATTFORM



AZURE SYNAPSE



AZURE SYNAPSE

One name, but several services...

Azure Data Factory

Azure SQL Serverless

Azure SQL Data Warehouse

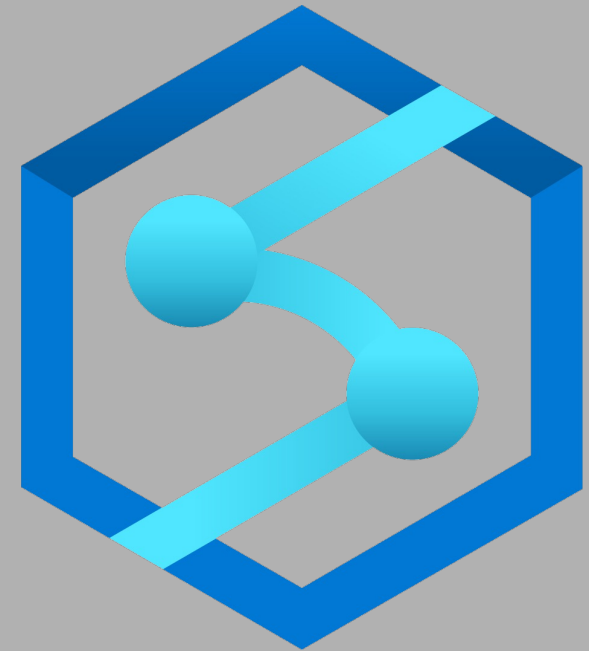
Azure Spark

Synapse Studio

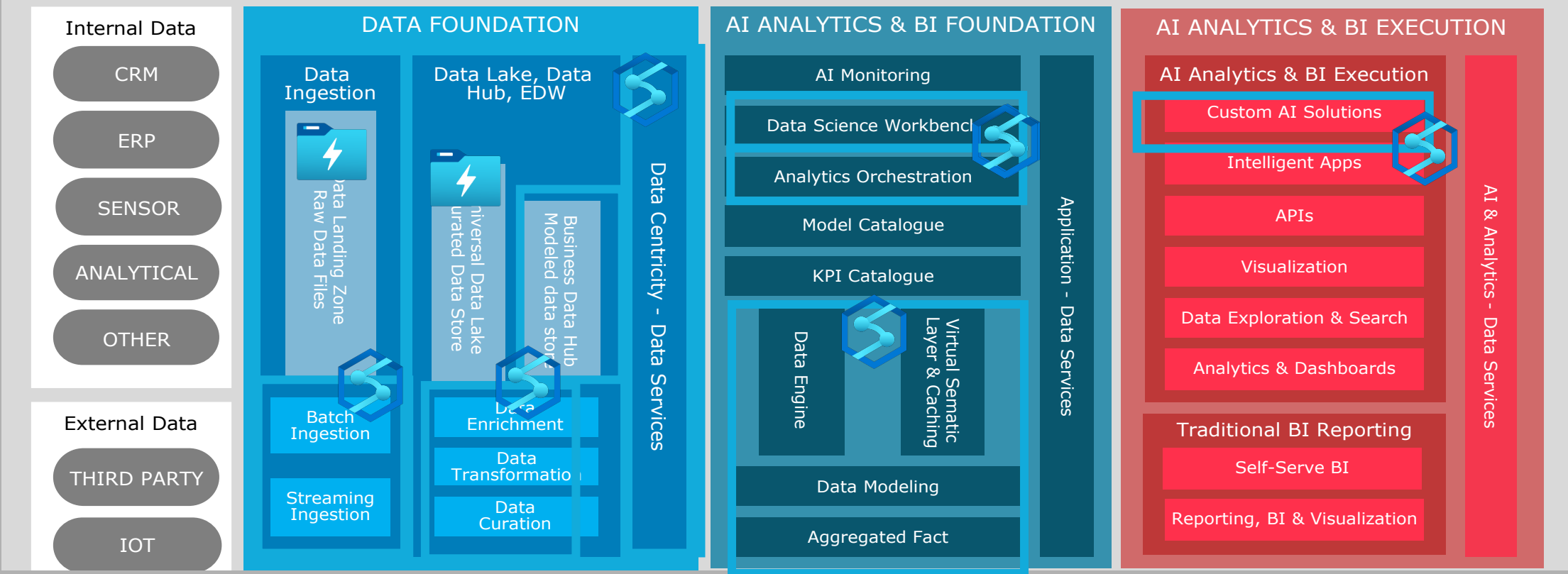
Azure Data Explorer (preview)

Azure Stream Analytics

Azure ML... (ONNX)



AZURE SYNAPSE



POWER BI

Market leading reporting and analytics tool with lots of use cases.

Data profiling

Self-service BI and Analytics

Modern reporting

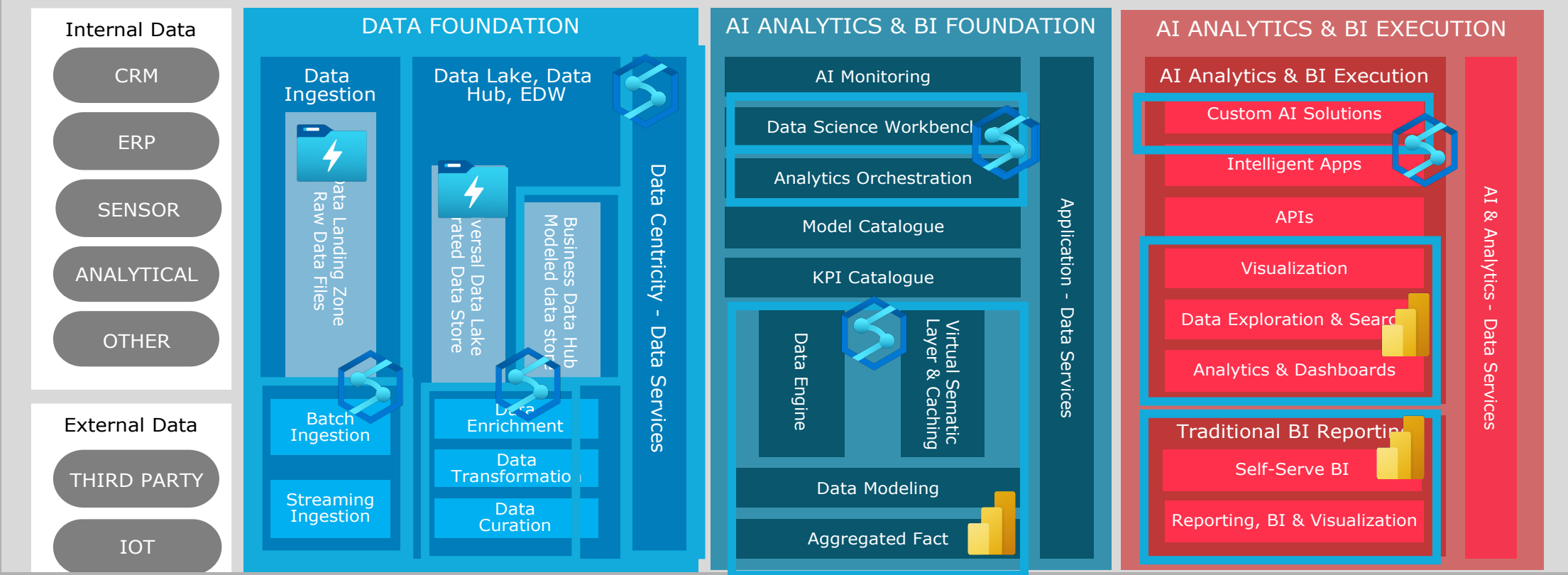
Dashboards

Real time reporting

Semantic layer (tabular models)



AZURE SYNAPSE + POWERBI



MICROSOFT 365 PURVIEW

Data Governance. One name, lots of functions

Data catalog

- Based on open standards (Apache Atlas)
- Rich REST API
- Can map multi cloud and on-prem environments

Business glossary

- Common understanding of concepts and wording
- Documentation of KPIs

Data Lineage



MICROSOFT 365 PURVIEW

Data security – data loss prevention

Privacy – classification rules and terms

Access controls– rule engine

- Azure Storage + Azure SQL (preview)

What about masterdata?

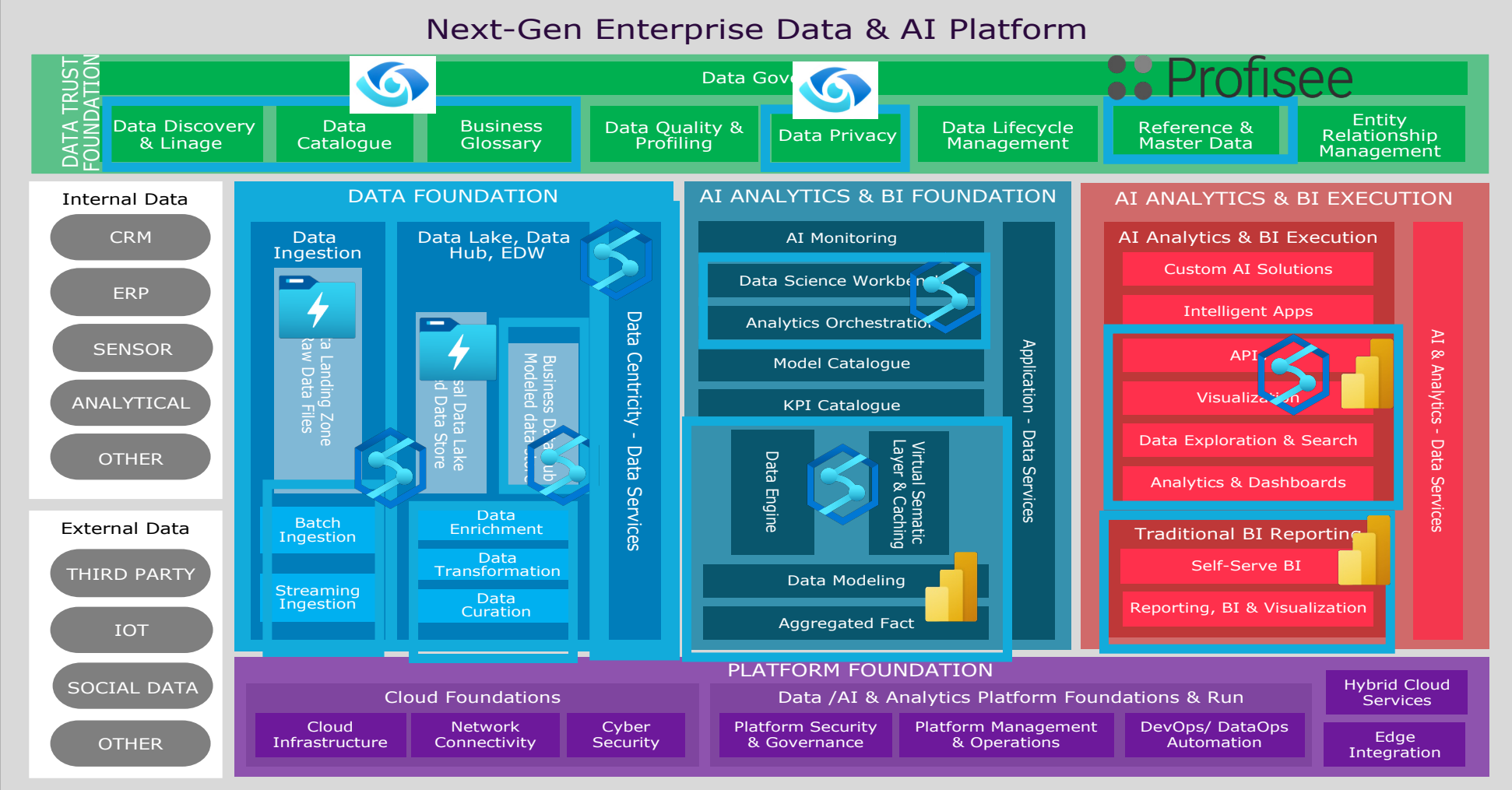
- Partnership with Profissee

Data Quality?

- On the wish list



AZURE SYNAPSE + POWER BI + PURVIEW



BUT IT DOESN'T END WITH THAT!

Tight integration with Azure ML

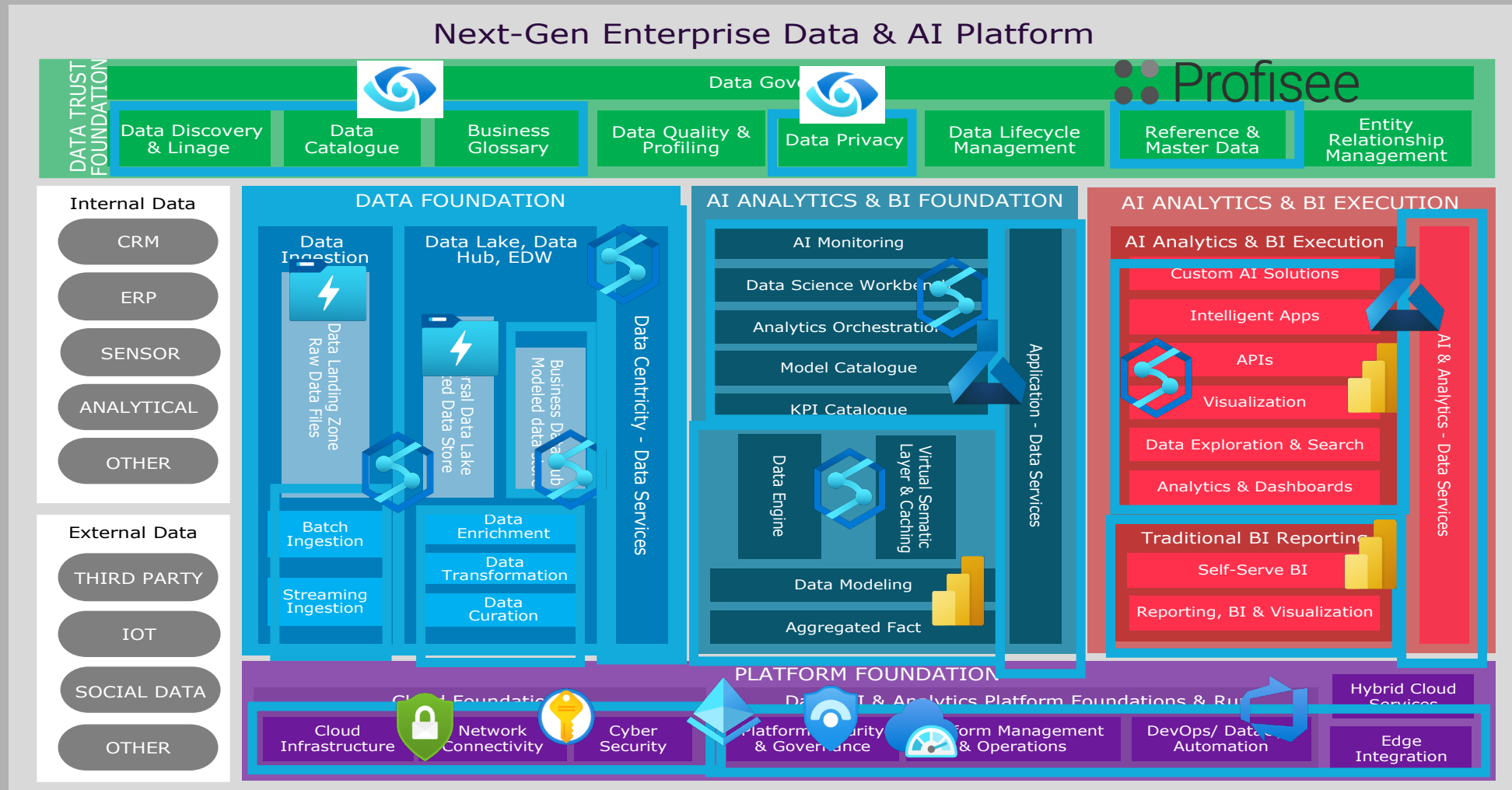
- low code machine learning + orchestration + catalog + API

Azure DevOps + Github

- Source control
- DevOps + MLOps
(Not quite there yet...)

Azure security and monitoring

AZURE SYNAPSE + POWERBI + PURVIEW+++ = TRUE





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@intoleranse



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QUESTIONS

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