Deloitte.

Exciting Analytics options for SAP in 2022

Eric Ledu, OMNIA AI Deloitte for ASUG BC

MAKING AN IMPACT THAT MATTERS since 1845

Agenda

Once Upon a Time, there was an SAP BW

Modern BI architectures

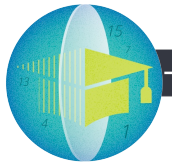
SAP new options in 2022

Leveraging hyperscalers platforms

Quick Overview of Omnia AI

Deloitte.

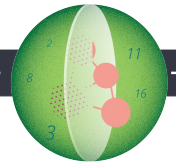
Omnia AI is Canada's leading Artificial Intelligence practice, helping clients across the AI journey from learning, strategizing, organizing data and towards gaining a competitive edge through AI.



Labs & academies

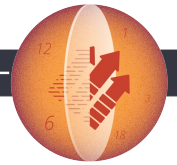
Labs accelerate the identification of AI initiatives with the highest value outcomes against your goals.

Custom AI academies up-skill technical and non-technical competencies your organization needs to succeed.



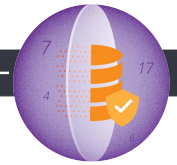
Strategy & operating model design

Looking to your strategic drivers- your north star- we define your unique roadmap with the right sequence of initiatives to realize sustainable business outcomes.



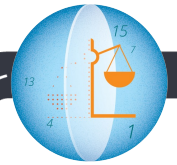
AI & analytics enablement

Make your AI strategy real by designing and operationalizing the AI delivery capabilities needed to realize value from your identified AI initiatives. These foundational capability will act as a springboard for further enhancements.



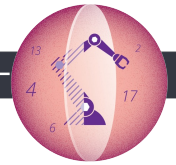
Data governance

Improve the quality of your data by re-envisioning your data governance strategy and establishing clear accountability concerning its generation and use.



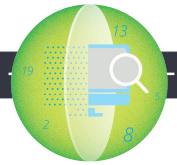
Ethics

Ensure your AI initiatives, and the data that powers them, operate responsibly and ethically by keeping key considerations top of mind throughout your journey and always aligning your strategy with your organization's core values.



Intelligent automation & products

Unleash efficiencies by transforming business processes with speed and precision by automating decisions based on structured and unstructured inputs.



Sector & domain insights

The art of the possible comes to life as we generate actionable insights using the new sector or domain-specific use cases identified in your strategy, or by validating pre-existing models.

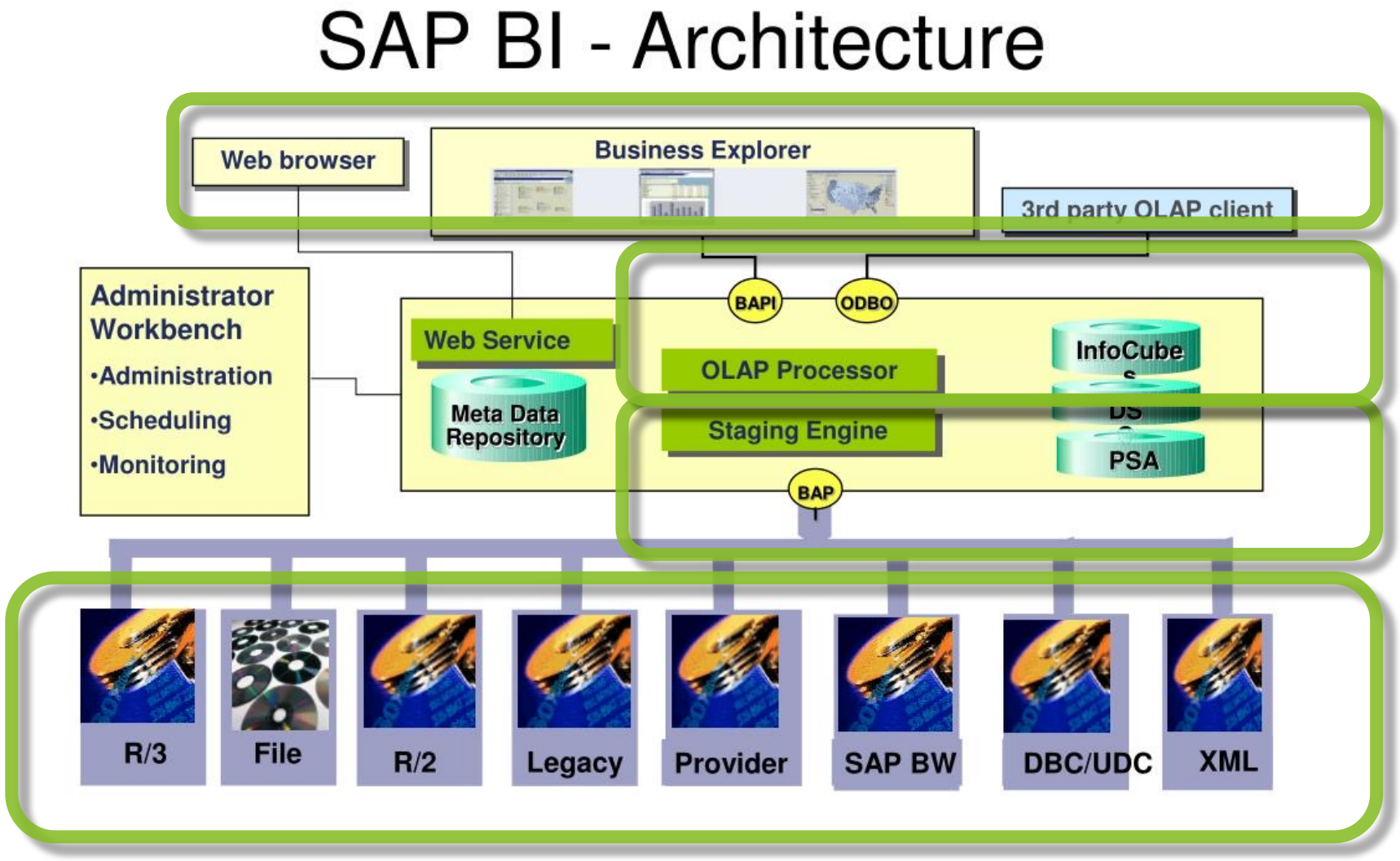
Data modernization

Extract maximum value from your data by modernizing your platforms to enable at-scale, data-centric solutions. This shift may require new systems, processes, and organizational structures.

The journey doesn't end here: Continuously evaluate the performance of AI initiatives against your strategic drivers, learning from your successes and setbacks and identifying new opportunities to transform your organization with AI.

Once Upon a Time, there was an SAP BW

SAP BI 10 years ago



Display

Storage

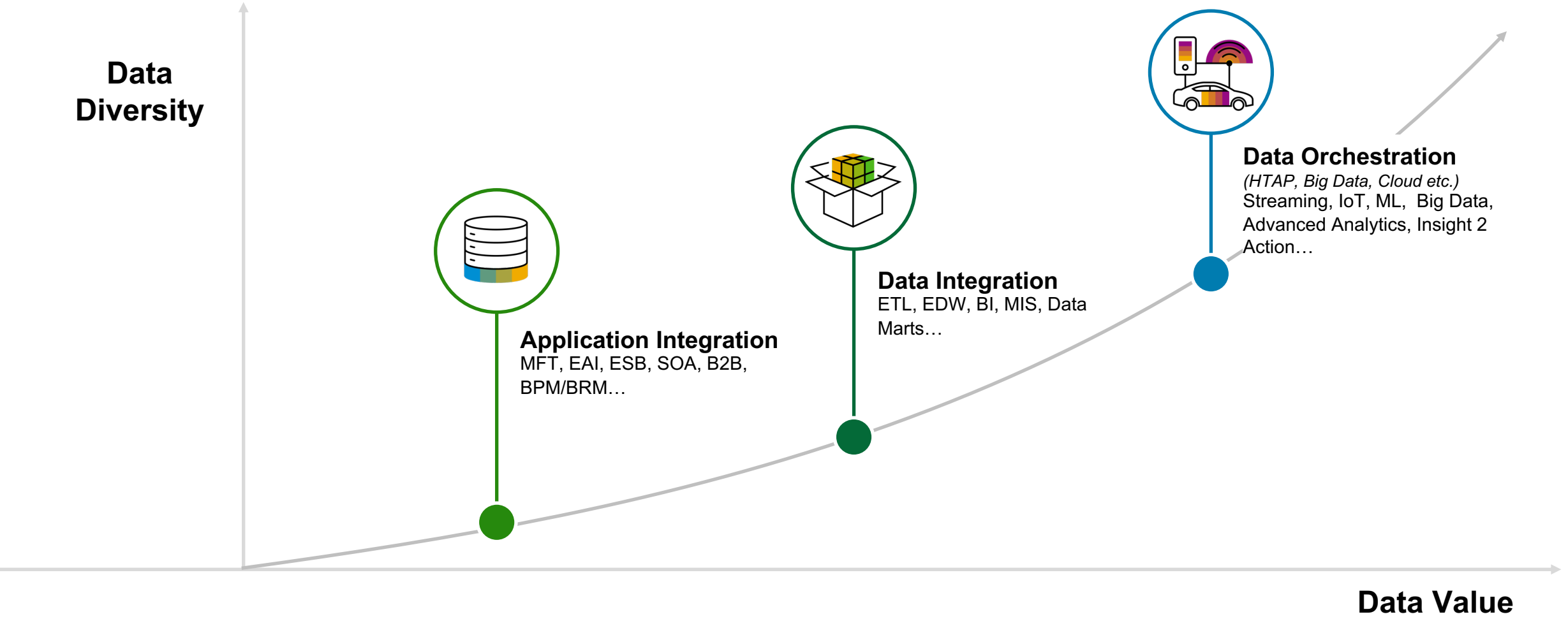
Extract, Transform, Load

Data sources

Modern BI architectures

The New Complexity

From data integration to Data Orchestration



Introducing the Datalakes

DATA LAKE

Data

unstructured

Users

Data Scientists,
Data Analysts

Use cases

Stream Processing,
Machine Learning,
Real time analysis

Raw

Data Lakes contain unstructured, semi structured and structured data with minimal processing. It can be used to contain unconventional data such as log and sensor data

Large

Data Lakes contain vast amounts of data in the order of petabytes. Since the data can be in any form or size, large amounts of unstructured data can be stored indefinitely and can be transformed when in use only

Undefined

Data in data lakes can be used for a wide variety of applications, such as Machine Learning, Streaming analytics, and AI

vs

DATA WAREHOUSE

Data

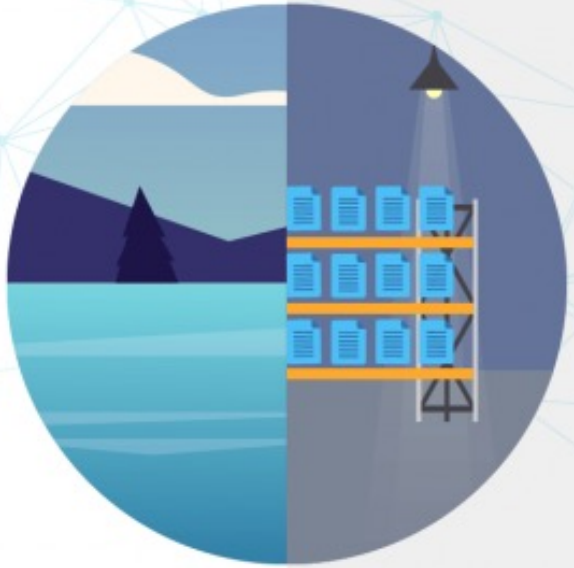
Structured

Users

Business Analysts

Use cases

Batch Processing,
BI, Reporting



Refined

Data Warehouses contain highly structured data that is cleaned, pre-processed and refined. This data is stored for very specific use cases such as BI.

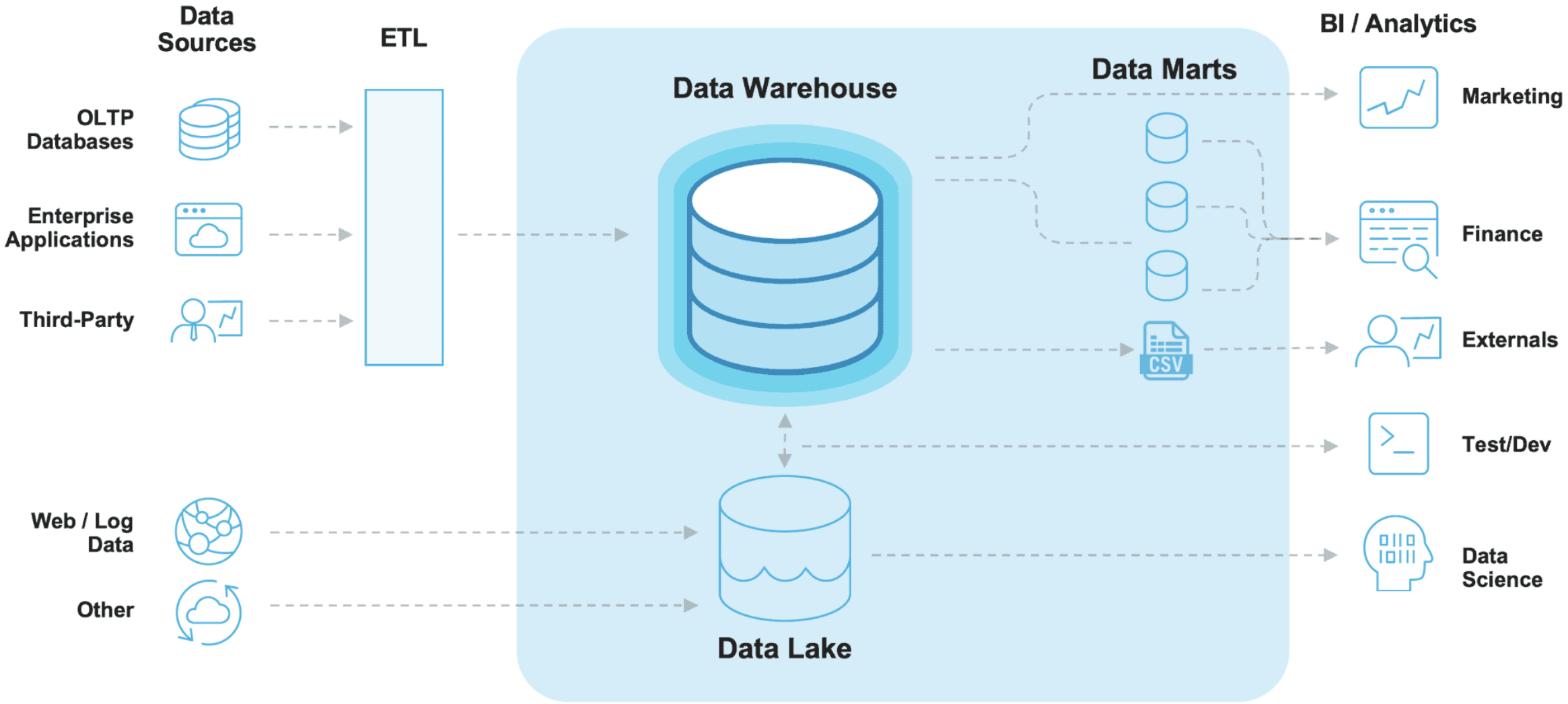
Smaller

Data Warehouses contain less data in the order of terabytes. In order to maintain data cleanliness and health of the warehouse, Data must be processed before ingestion and periodic purging of data is necessary

Relational

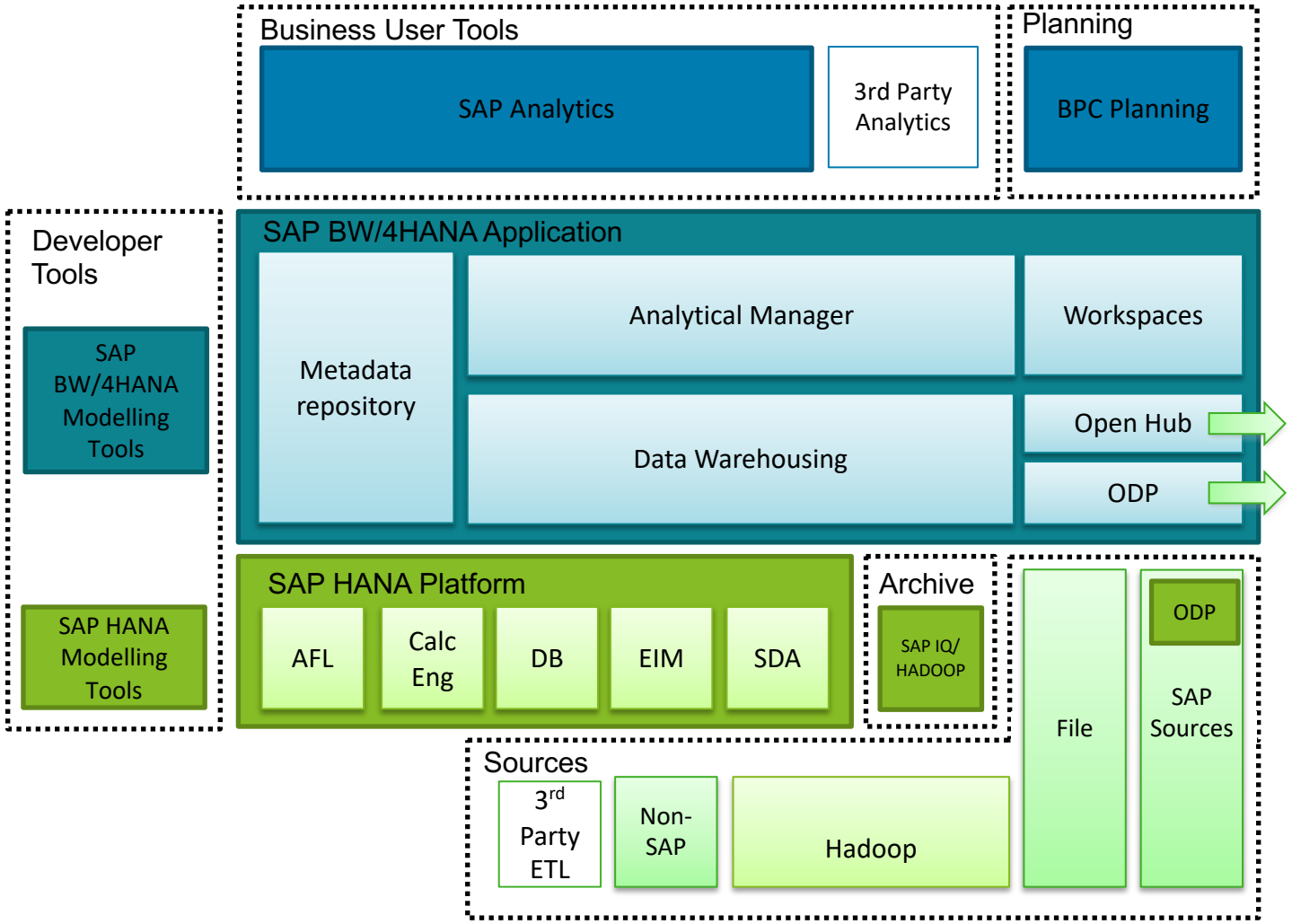
Data Warehouses contain historic and relational data, such as transaction systems, operations etc

Typical Modern BI Architecture



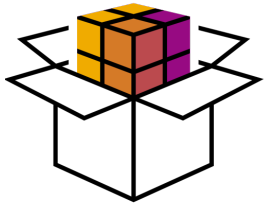
SAP new options in 2022

SAP BW/4HANA Architecture



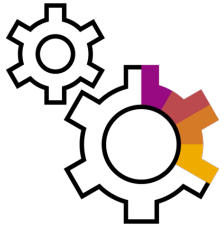
SAP BW/4HANA

High Performance



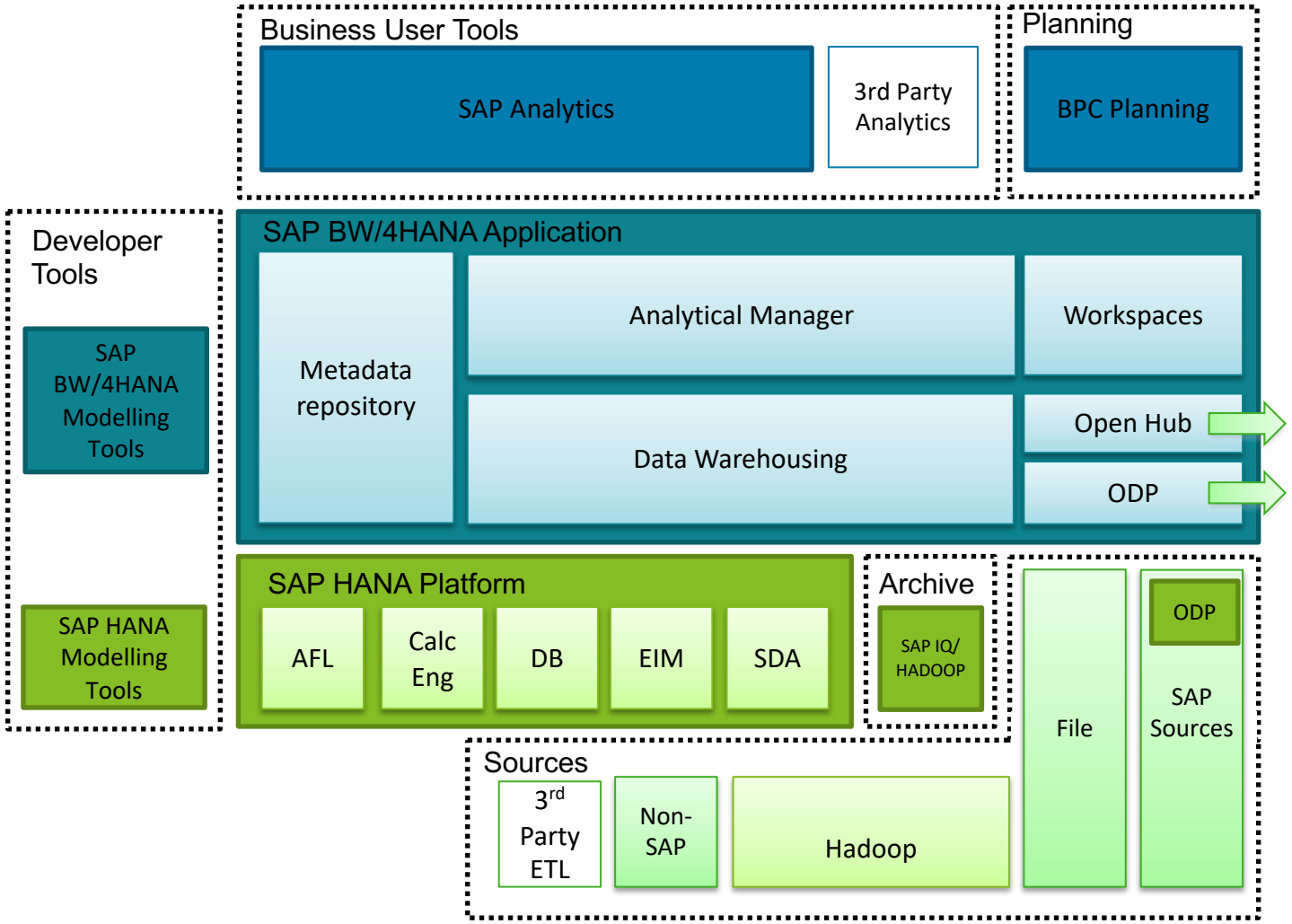
Openness

SAP BW/4HANA Design Principles



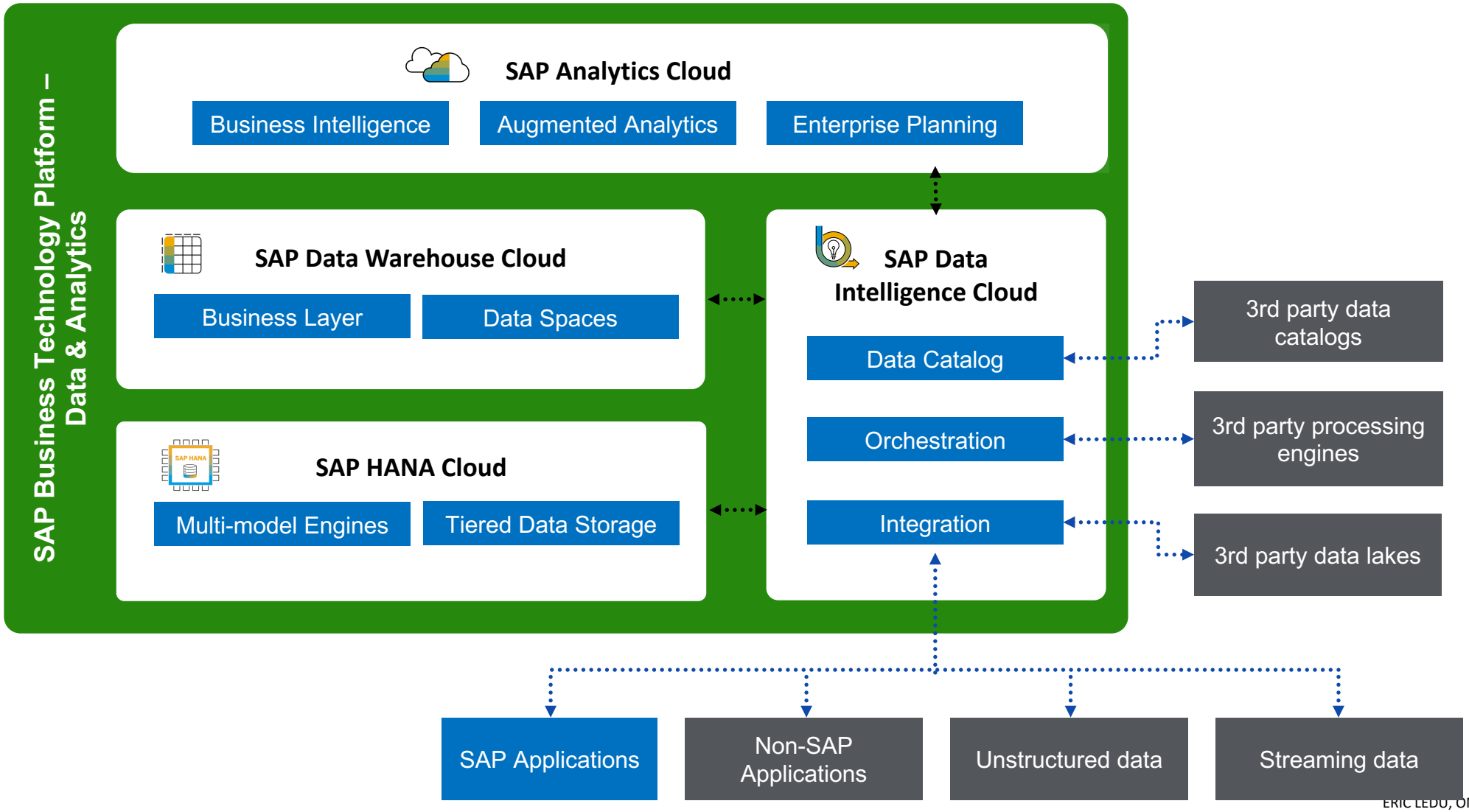
Simplicity

Modern Interface



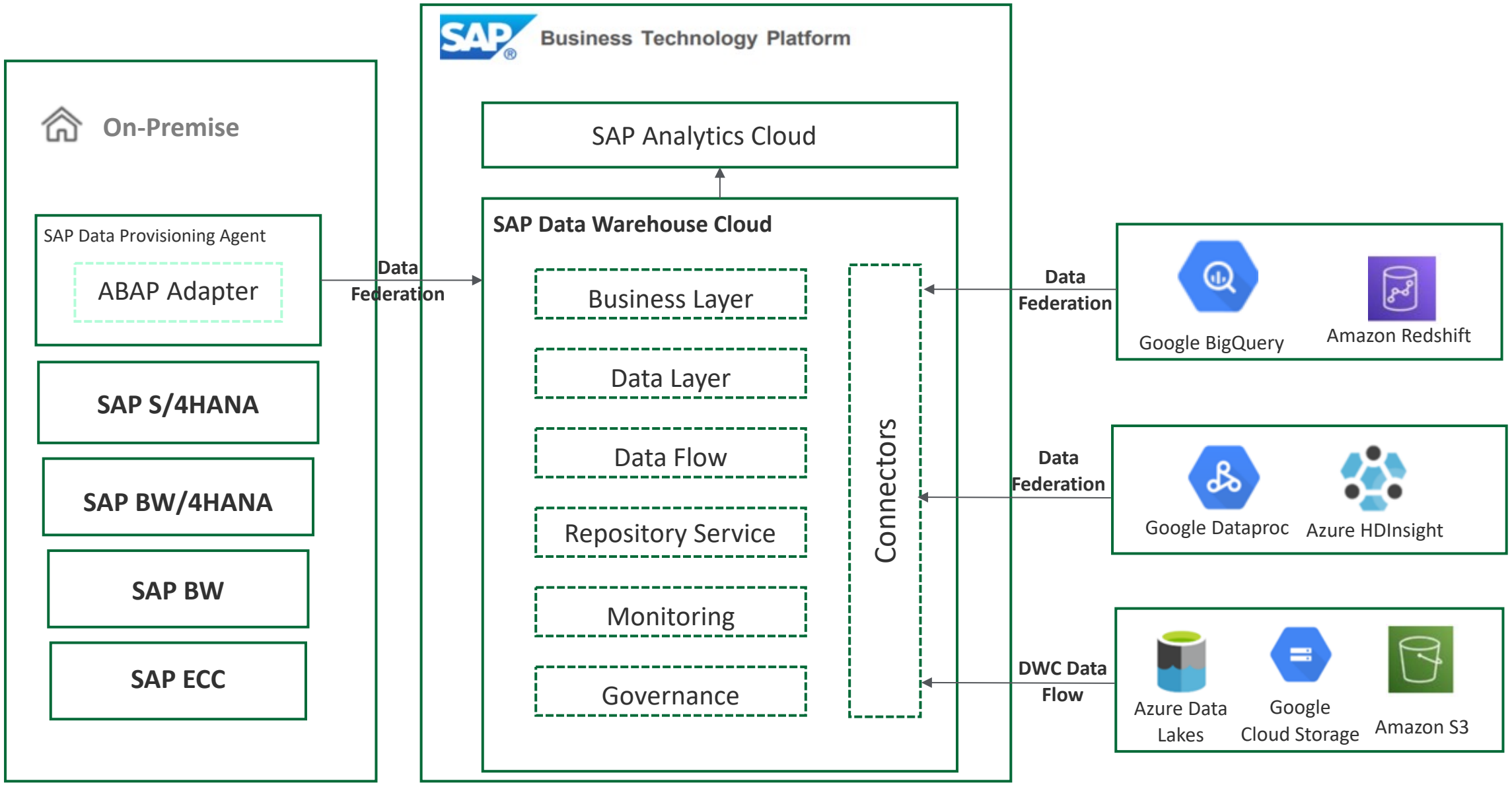
SAP BTP Components for SAP Analytics

Enabling and end-to-end data fabric



Possible Reference Architecture

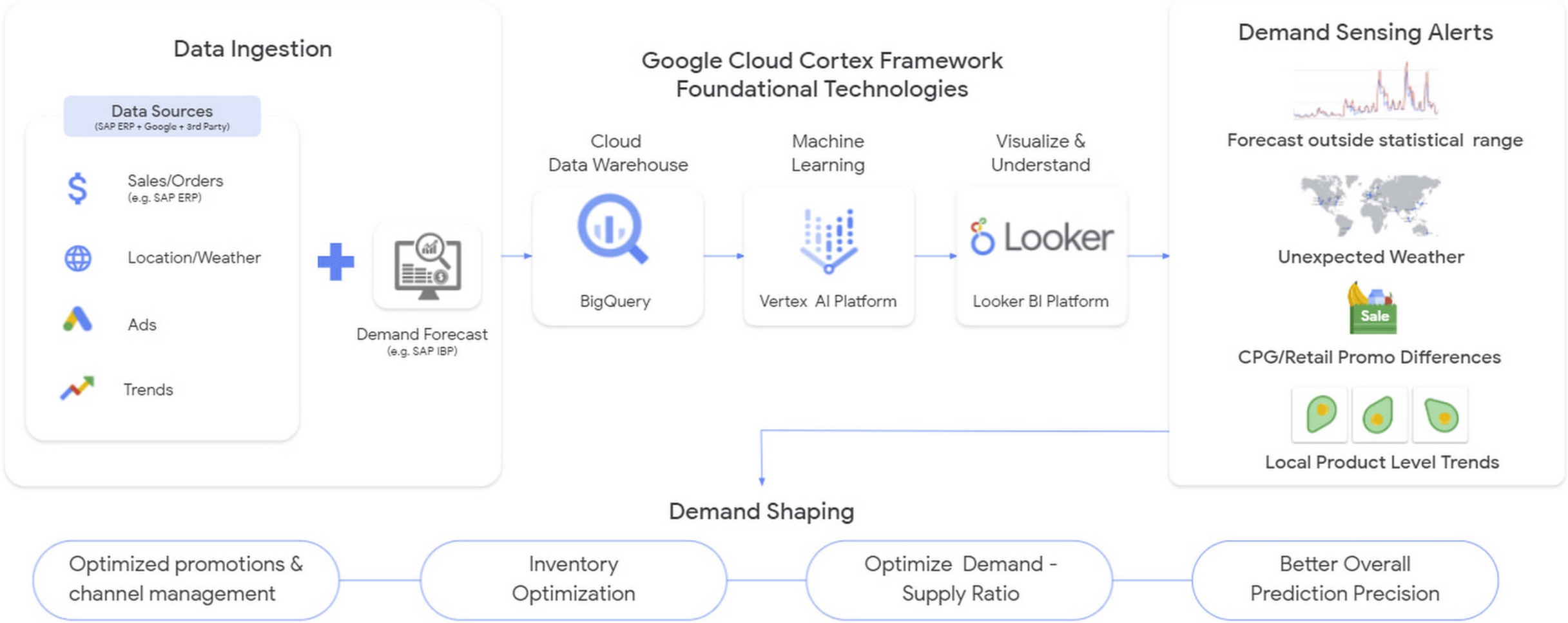
SAP POV on Federation / Cloud integration



Leveraging hyperscalers platforms

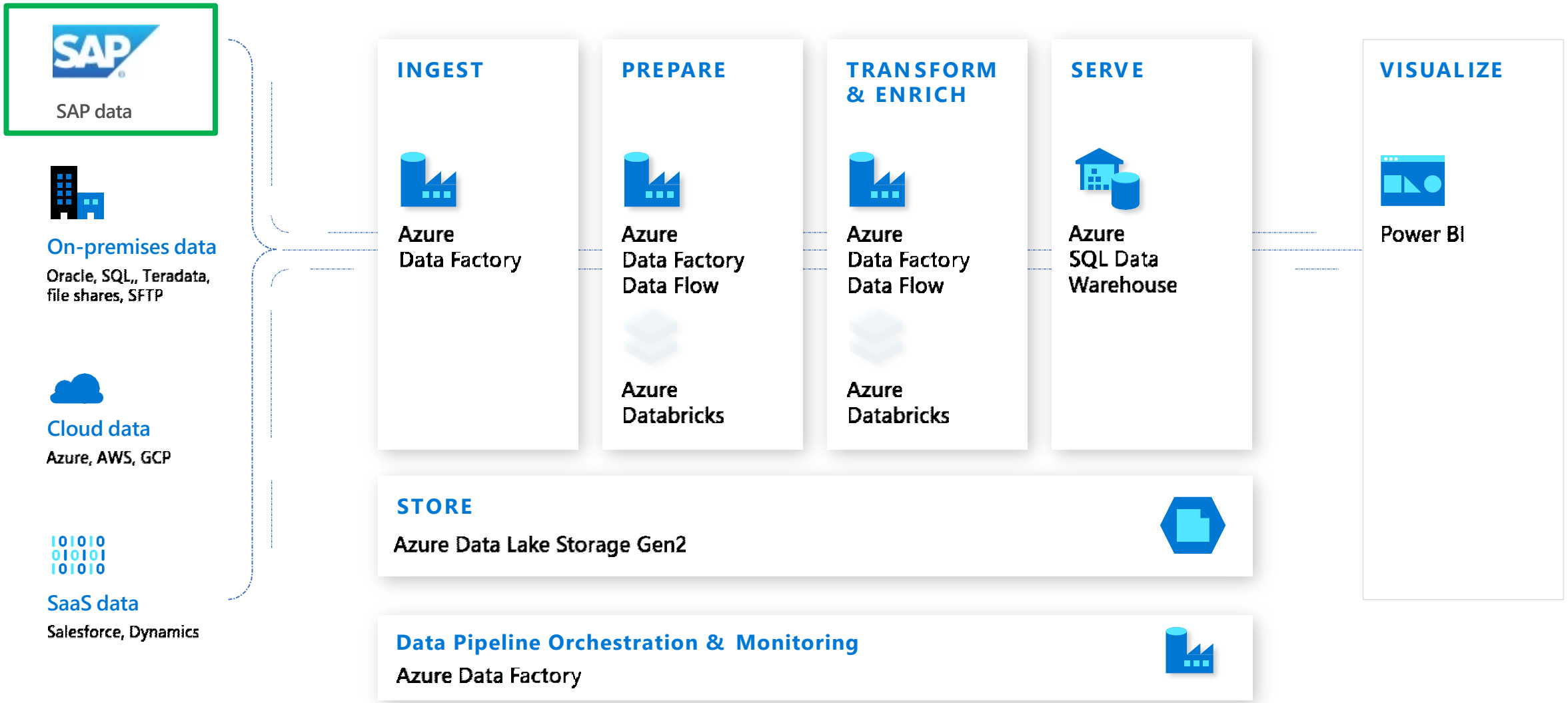
SAP and Google Cloud Platform

Cortex Framework for prebuilt scenarios with SAP



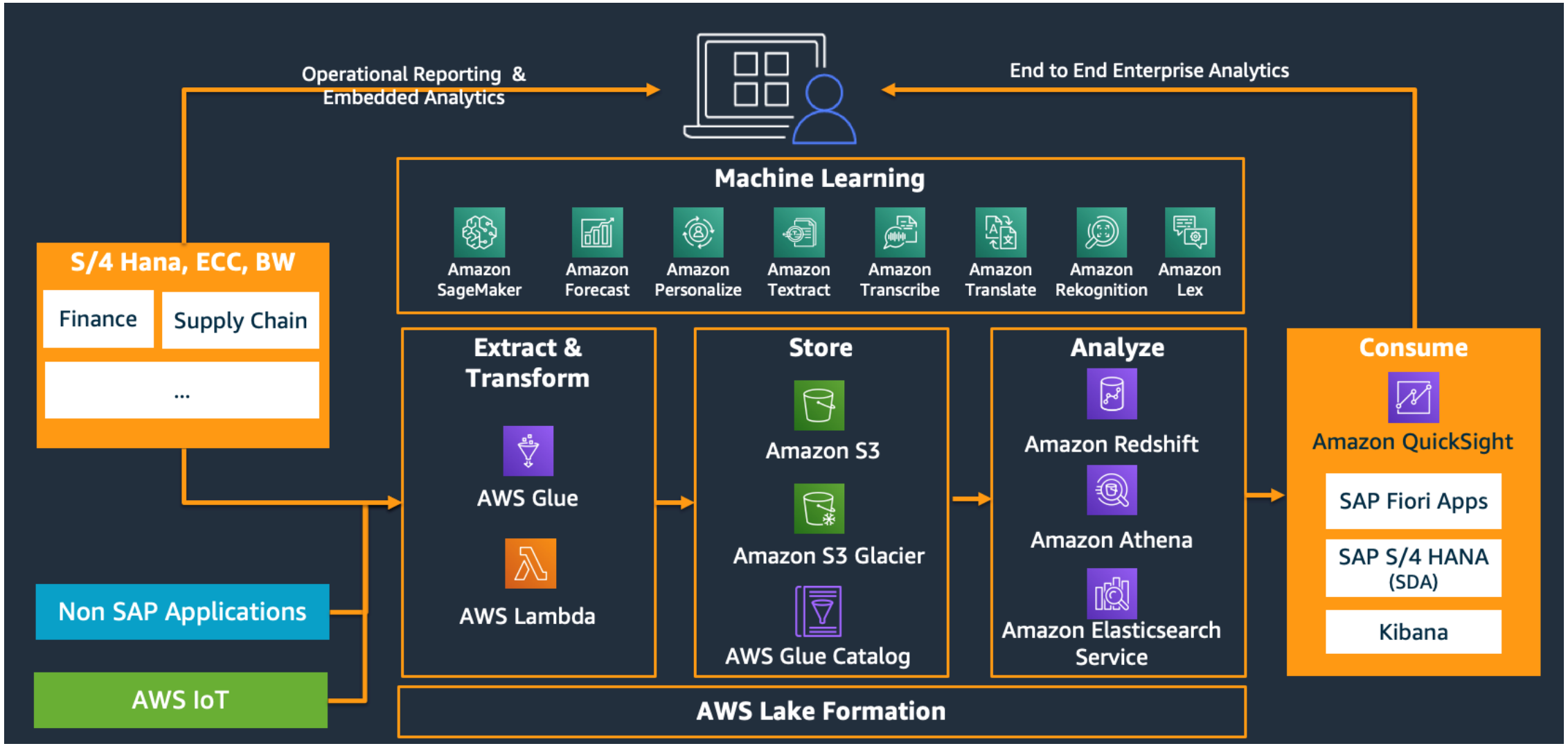
SAP and Microsoft Azure

Modern BI architecture with SAP and MS



SAP and AWS

multiple options with Amazon AWS



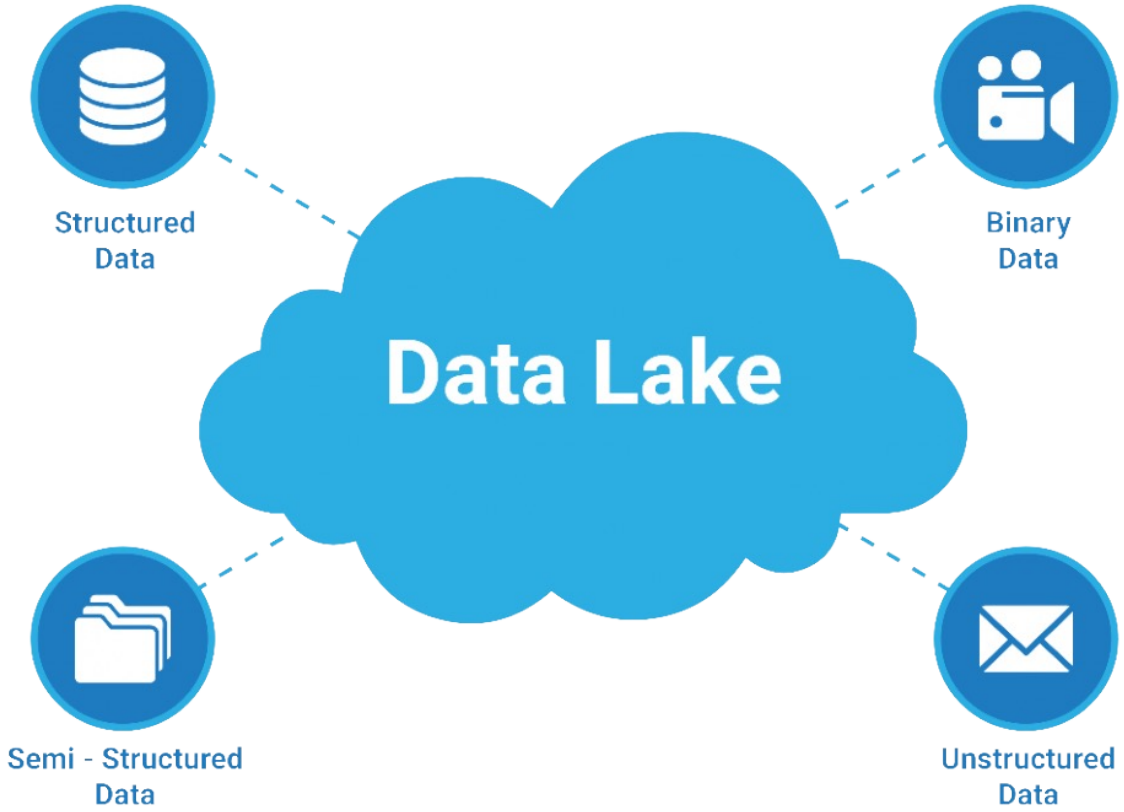
Just a final warning

A lot of our customers are asking about a new strategy for BI:

"**Let's extract data from SAP and put it into our data lake and create our own data warehouse on top of it.**"

This strategy is often positioned for the following reasons:

- cost savings
- scalability
- Hibernation capabilities
- Flexible commercial models
- Mixing SAP and non-SAP data
- …



New Datalake with SAP data

PROS

Typically built on **commoditized horizontally scalable** cloud and open source technology

Don't need to know what you are going to do with the data up front (schema on read)

IT focus on data acquisition, business focus on data analysis

Advanced users are empowered as they have ready **access to raw data**

Cost to store, process and analyze large volumes Of data is low

All your data is stored in a **centralized location**, thereby simplifying access to the enterprises single version of the truth

Consumable via broad range Of data analysis and processing tools (including AI and ML), therefore **highly versatile**

CONS

Solution often involves capabilities from **several vendors plus opensource**

Data that **was once governed, secure and semantically consistent** can lose these critical attributes in the Data Lake

“Build it and they will come” means the Data Lake will inevitably contain data no one understands, no one is aware of, or no one ever uses.
This means associated acquisition and storage costs are wasted (**"data swamp"** effect)

Data acquisition is just the start, there is still a **cost to prepare data** for analysis, which is VERY often underestimated

Real-time reporting and Data Lake concurrent access are known problems

Not designed with business users in mind, Often lack self service capabilities

Losing the **delegated security to access data** that is provided automatically in SAP applications

Legal Considerations : The **ERP environment remains the legal system of record**, which is critical for any companies operating in regulated environments (Pharma, Chemical, Financial etc).

Thank you !