

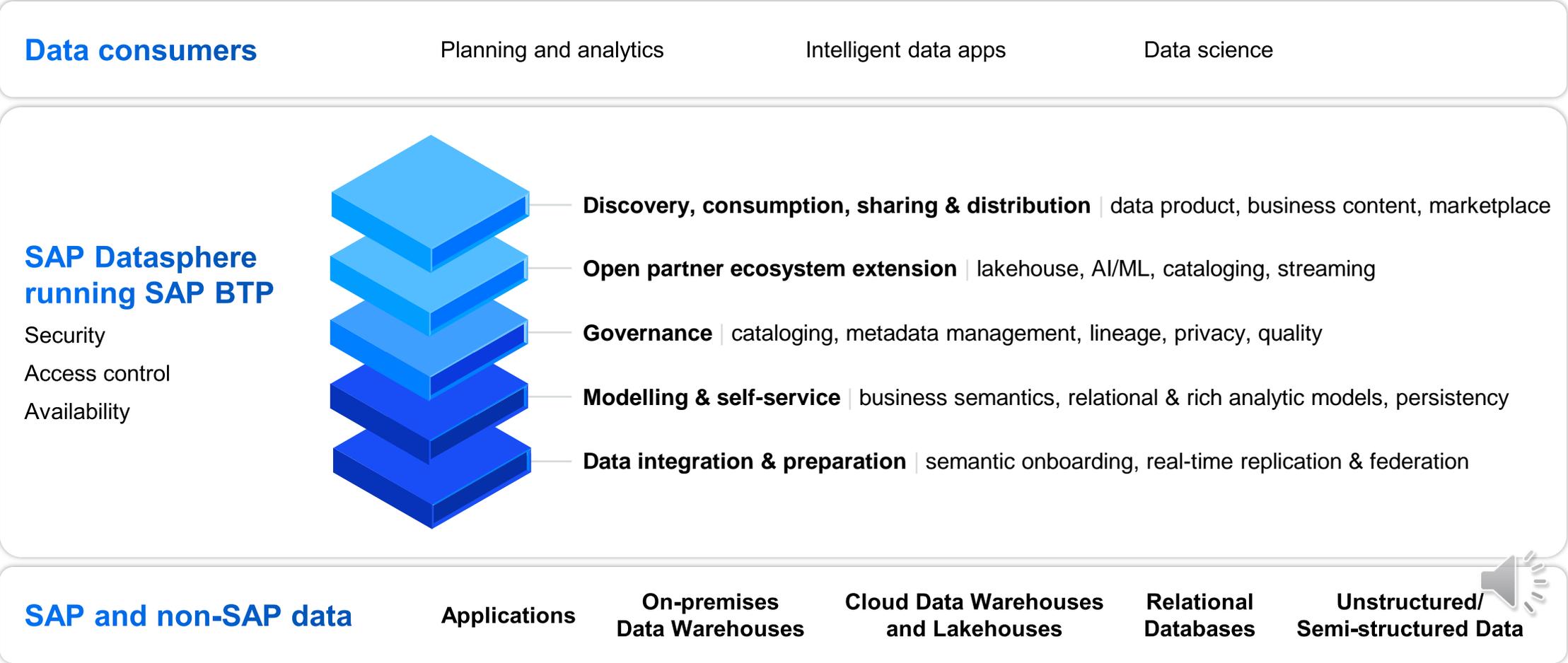
SAP BW Modernization Series

Session 5 – Part 3

Justin Lynch, SAP



SAP Datasphere is the foundation for a business data fabric architecture



SAP Datasphere provides capabilities for a complete Business Data Fabric architecture

Business Semantics

Keeping **SAP business context** and logic intact by delivering an integrated, **semantically-rich data layer**

Data Integration

Data federation and **replication** capabilities to combine sources and harmonize heterogeneous data

Analytical Data Modeling

Rich modeling capabilities to solve complex modeling tasks by **reusing the semantics** from SAP applications

Space Management

Enable self-service data access to connect your global and local data for **different lines of business**

Connectivity

Enable access to all data no matter where it resides – SAP & non SAP sources across on-prem & inter-cloud

Openness

Multi-cloud support with interfaces **leveraging open data partner** solutions

Data Marketplace

Enrich data projects with trusted industry data from thousands of providers **in clicks, not projects**

SAP BW Move & Hybrid

Leverage investment and extend on-prem scenarios with **SAP BW Bridge** and hybrid landscapes

Cataloging & Governance

Discover, manage, and govern all data throughout the data lifecycle using the **catalog**

Analytics & Planning

Powerful end-to-end **analytics & planning** integration with SAP Analytics Cloud & Microsoft Office

SAP Datasphere, SAP BW bridge

Key Capabilities & Value Proposition

What is the SAP BW bridge?

An SAP Datasphere **feature**, providing a path to the public cloud for SAP BW NetWeaver & SAP BW/4HANA customers.

Offers SAP BW capabilities directly in SAP Datasphere:

- **Connectivity & Business Content** providing proven SAP BW-based data integration (Extractors) from SAP ECC and SAP S/4HANA
- **Enterprise-ready staging layers** of SAP BW for managing data loading with partitioning, monitoring, error handling
- **Tool-supported move** of SAP BW-based integration and staging (for details see [SAP Note 3141688](#))

What are the key value propositions?



Reuse for business continuity

Leverage SAP BW data structures, transformations, customizations, and skills – quickly extending your SAP BW investments to the public cloud



Connect with confidence

Integrate on-premises SAP Business Suite data with familiar connectivity and semantic richness – retaining instant access while expanding your analytics depth



Innovate with cloud agility

Empower your business to rapidly innovate on BW data with an open, unified data & analytics cloud service – scaling innovation and efficiency in the cloud



SAP BW bridge offers SAP BW capabilities directly in SAP Datasphere

Fast results. Less cost.

Use SAP BW bridge content inside SAP Datasphere, out of the box

DataSources

Data Flows

InfoObjects

Advanced DataStore Objects

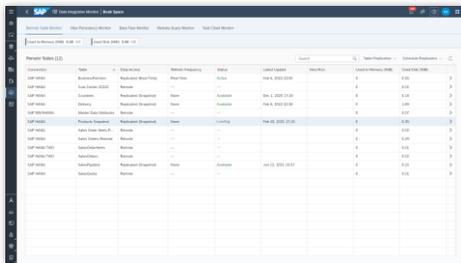
Transformations

CompositeProviders

5.600 objects & 24.300 man-days worth of content
– “out the box, free of charge”!

Integrate. Open for Virtual Access and Persistence

Virtual Access

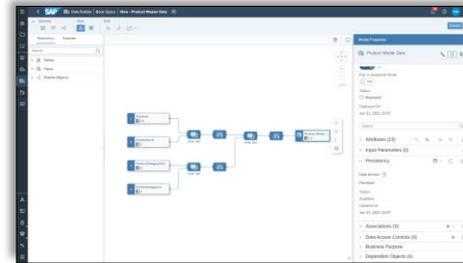


Remote table federation

- Leave data in the source system and access remotely in real-time when needed
- No upfront data movement
- Federation is supported across various sources and hyperscalers



Persistence



Remote table replication

- Real-time replication or snapshots using single entities

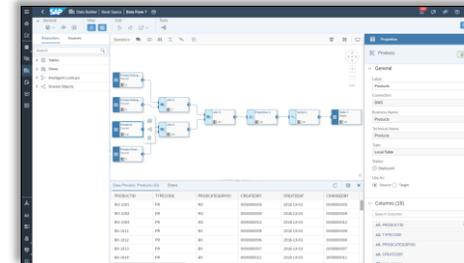
Replication flow

- Replication with multiple entities and flexible targets

View Persistence

- Materialize view output results in a stable persistence

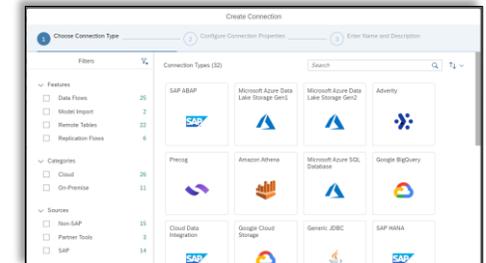
Data Flow



Batch loads & transformations

- Combine structured and semi structured data while defining ETL processes
- Advanced transformation capabilities leveraging Python 3
- Schedule in task chains

External Tools

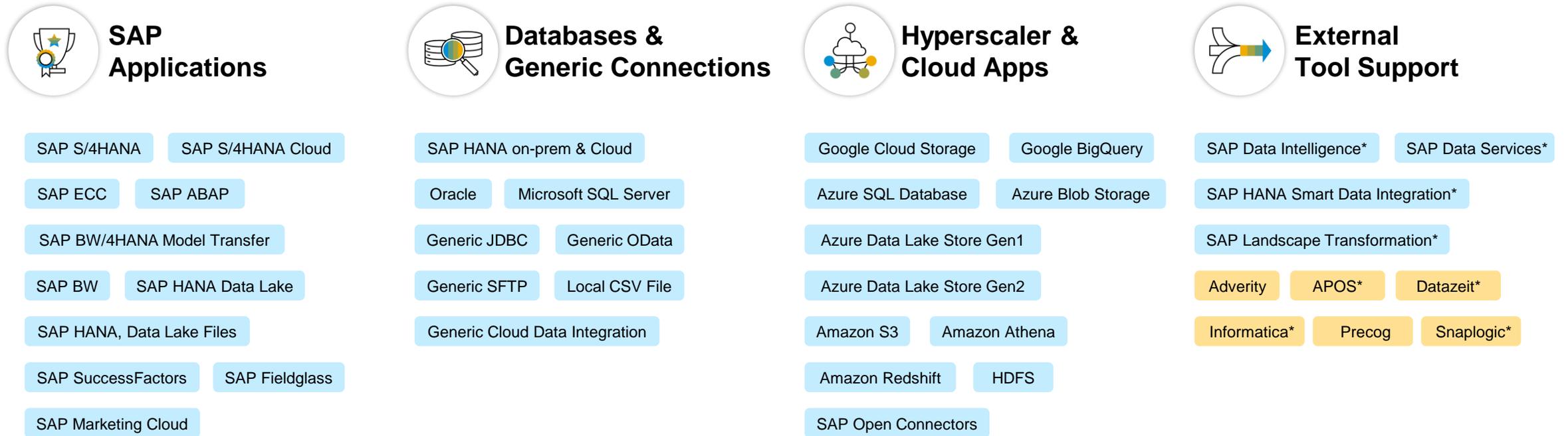


Integrate with all data sources

Allow external data movement tools like SAP Data Services, SAP Data Intelligence, SAP OpenConnectors, SnapLogic, Precog, Adverity, etc. to bring data into the system using SQL interfaces and the open SQL schema



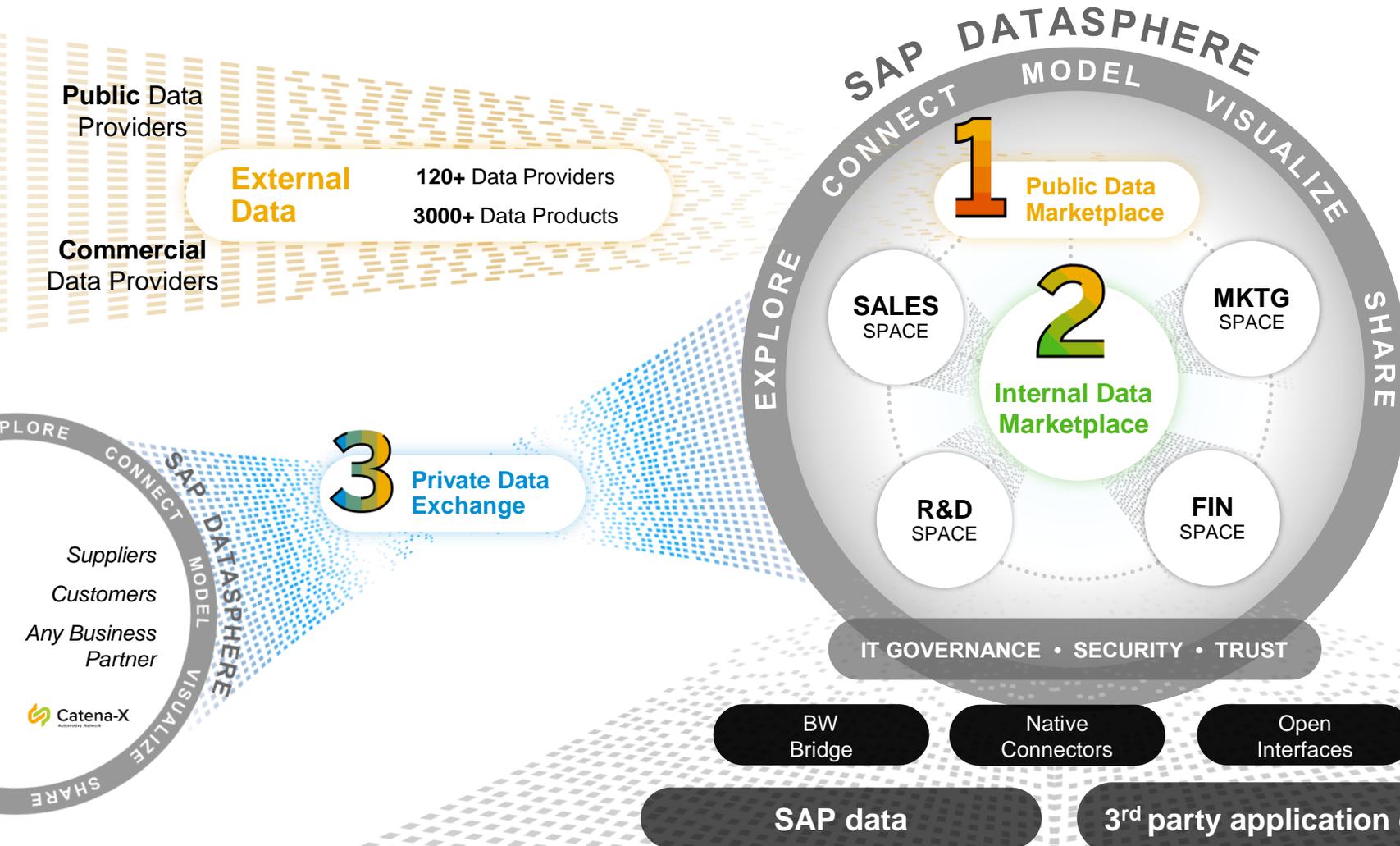
Integrate. Data Sources Overview



SAP Help: [Connection Overview](#)

Integrate. Data Marketplace

Access to external & internal data in clicks for better, faster & more scalable data collaboration



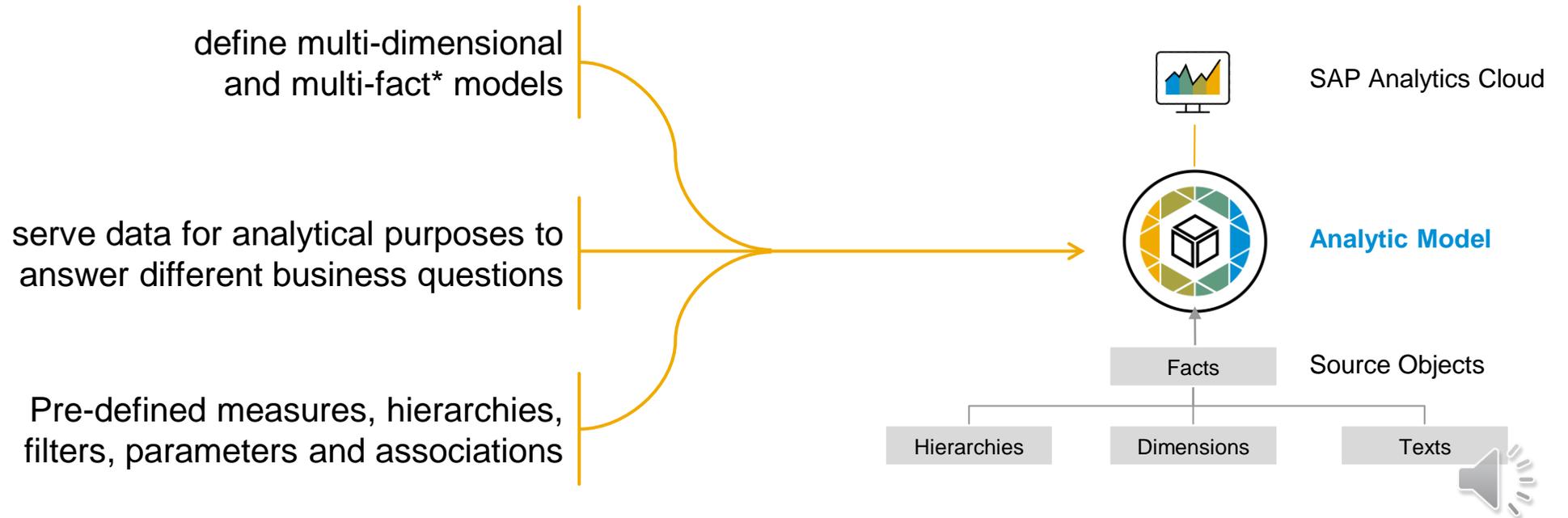
The Data Marketplace technology provides data sharing capabilities and processes to conduct the following use cases:

- 1 Public Data Marketplace**
 Discover & connect external data products for instant usage in your space for harmonization with other (internal) data artifacts.
- 2 Internal Data Marketplace**
 Productize internal data assets for more scalable self-service and more effective adoption.
- 3 Private Data Exchange**
 Exchange data with suppliers, customers and other business partners in private environment within or between tenants.



Manage. Analytic Model Overview

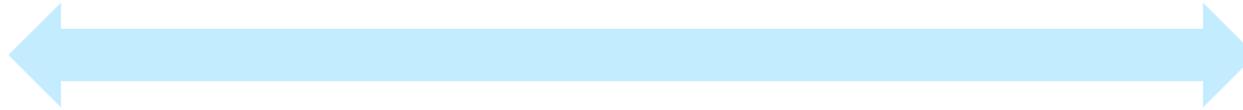
Analytic Models are the analytical foundation to make data ready for consumption in SAP Analytics Cloud.



* According to the [Roadmap](#)

Manage. Modeling for Everybody

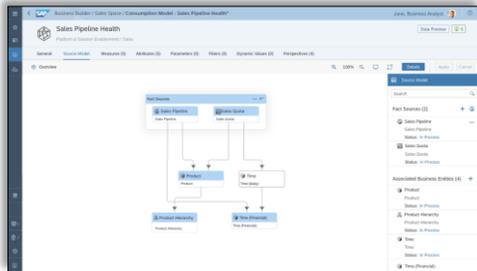
Business Analyst
No Code / Low Code



Developer / Power User
Pro Code

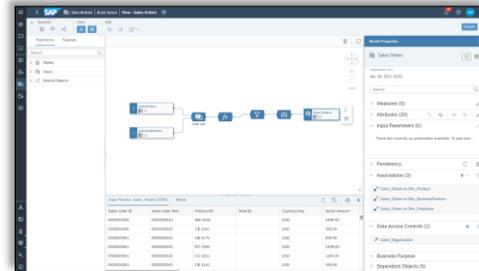
BUILT-IN EDITORS
modeling for all users

Business Modeling



- Allow for a greater degree of self-service
- Non-disruptive environment for business scenarios – independent from the data integration layer

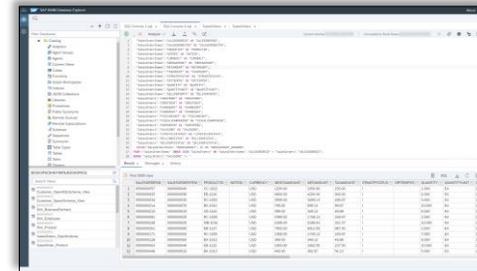
Graphical & Scripted



- Collection of no code/low code editors to support Graphical Modeling
- Model E/R-models, Tables, Views, Analytic Models, SQL & SQL-Script Views
- Focuses on most-used modeling operators

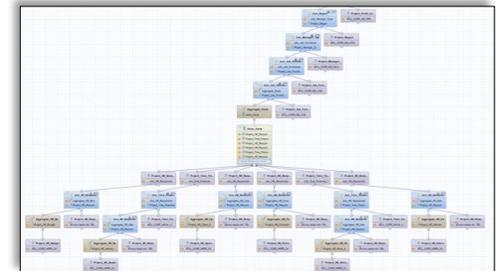
EXTERNAL EDITORS
integrated SQL Data Warehousing

Open SQL Schema



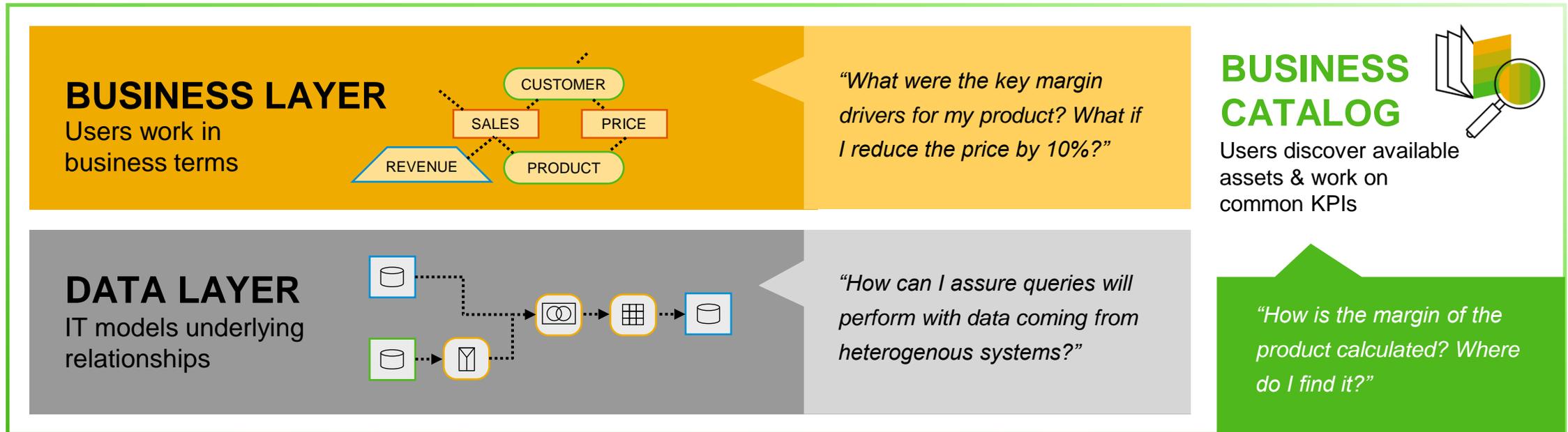
- Option to use SQL DDL & DML leveraging e.g. SQL Views, Tables, Procedures, etc.
- Leveraging existing SQL-tooling & skillset
- SAP Database Explorer

SAP HANA Deployment Infrastructure



- SAP HANA Cloud Modeling capabilities leveraging Calculation View, Flowgraph, Synonym, etc.
- Simply re-use HANA based Modeling within SAP Datasphere

Manage. Collaborate in business terms



- Business entities and relationships with business language

- Model standardization and re-use for efficiency

- Independence for business users from IT



Manage. Intelligent Lookup

- Intelligent Lookup is a business-centric, interactive data harmonization environment for subject matter experts, which lets you iteratively join entities by defining rules to match records and then reviewing the results
- New operator in Data Builder allowing to harmonize data that share no common identifier, starting where traditional joins are failing
- Interactive environment for mappings
- Filtering and sorting of multiple columns including rule-specific column filters on input and lookup entities
- Mappings need to be created only once and can be automated through rules
- Use output view of Intelligent Lookup in other models
- [More information](#)

The screenshot displays the SAP Data Builder interface for an Intelligent Lookup rule named 'Intelligent Lookup Whats New'. The top section shows a flow diagram with three 'Rule Exact Match' and one 'Rule Fuzzy Match' operators, connected to 'Sales Input' and 'Customers Lookup' data sources, leading to an 'Intelligent Lookup Output'.

Below the diagram, a summary bar indicates: Rule (395), Matched (286), Review (49), Multiple (9), Unmatched (51), and Error.

The main view shows two data tables side-by-side:

NG_Sales_v5						NG_Customers_v4		
Rechnungsnummer	Rechnungsadresse__Strasse_	Rechnungsadresse__Ort_	Kunde_Name	Kunde_Vorname	SCORE	Kundennummer	Kunde_Adresse__Stras...	Ku...
<input checked="" type="checkbox"/>	1225	Kanzlerstr. 31	Eckelsheim	Senn	93.00%	700	Kanzlerstraße 31	Ec...
<input type="checkbox"/>	1533	Kanzlerstr. 31	Eckelsheim	Senn	84.00%	701	Kanzlerstraße 31	Ec...
<input type="checkbox"/>	1569	Kanzlerstr. 31	Eckelsheim	Senn	80.00%	702	Kanzlerstraße 31	Ec...
<input type="checkbox"/>	4925	Kanzlerstraße 31	Eckelsheim	Zenna				
<input type="checkbox"/>	4928	Kanzlerstraße 31	Eckelsheim	Zenna				
<input type="checkbox"/>	4930	Kanzlerstraße 31	Eckelsheim	Zenna				
<input type="checkbox"/>	4989	Kanzlerstraße 31	Eckelsheim	Senna				
<input type="checkbox"/>	4991	Kanzlerstraße 31	Eckelsheim	Senna				
<input type="checkbox"/>	4994	Kanzlerstraße 31	Eckelsheim	Senna				

