



# SAP Data Warehouse Cloud

## EDW Strategy & Virtual Hands-On Workshop

SAP Data Warehouse Product Management

PUBLIC

THE BEST RUN 

**45m Overview SAP EDW Strategy & SAP Data Warehouse Cloud**

**15m Q&A**

**30m Break**

**2h SAP Data Warehouse Cloud Hands-On (optional)**

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## SAP HANA Cloud Services

TECHNOLOGIES



### SAP HANA Cloud

Manage your data storage, federation, and run powerful applications with the power of SAP HANA in the cloud



### SAP Data Warehouse Cloud

End-to-end data warehouse in the cloud that combines data management processes with advanced analytics



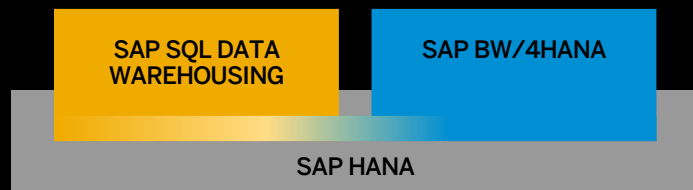
### SAP Analytics Cloud

Analytics technology – business intelligence (BI), planning, and predictive analytics – in a single solution

# SAP Data Warehousing

## Statement of Direction

SAP continues to innovate industry leading data warehousing technologies with SAP Data Warehouse Cloud, SAP SQL Data Warehousing, and SAP BW/4HANA to enable the Intelligent Enterprise. SAP Data Warehouse Cloud will not replace any on-premises SAP Data Warehousing solution, but complements the existing data warehouse portfolio of SAP.



### ON-PREMISES

**SAP BW/4HANA** and **SAP SQL Data Warehousing** are the strategic solutions for on-premises and private cloud data warehousing.



### HYBRID

SAP Data Warehouse Cloud extends your existing data warehousing investment to support **hybrid cloud**.



### CLOUD

**SAP Data Warehouse Cloud** is the strategic public cloud product offered as a software service managed by SAP.

# Typical scenarios for SAP Data Warehouse Cloud



## Extend Data Warehousing

VIA HYBRID SCENARIOS

Tight integration of on-prem scenarios (like SAP S/4HANA or SAP BW/4HANA) by extending on-prem data with cloud data to **enhance models** for broader insights



## Accelerate Analytics

VIA DATA MARTS

New scenarios: extract, replicate, or federate data from different sources to **create new models**



## Gain Insights Into All Your Data

VIA CROSS-APPLICATION WAREHOUSING

**Connect Data** without duplication that crosses business applications and data sources: model, connect, clean, and map data from various sources to provide a consistent view of data

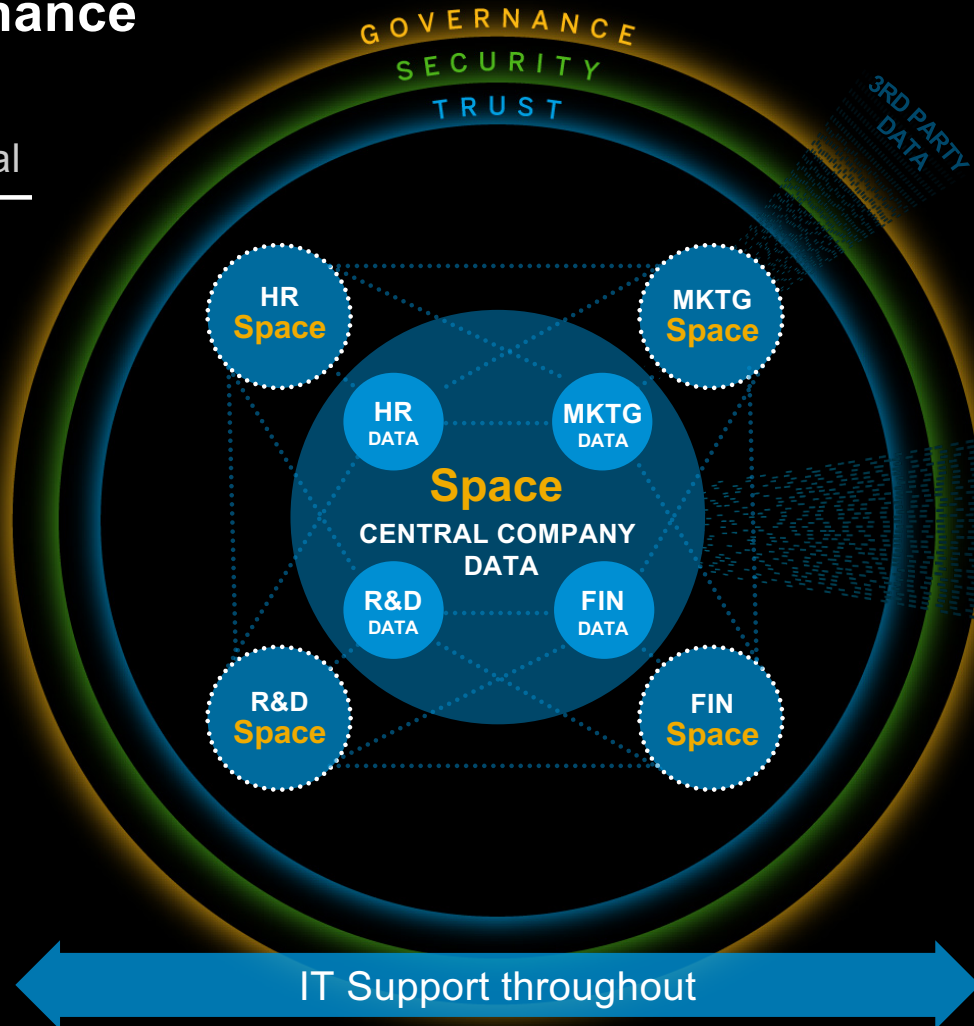
# The Solution: Spaces empower LOB users while maintaining security and governance

## Spaces are virtual

- Constantly Up-to-date
- Managed Subset
- Linked
- Secure



Users interact and share data inside virtual spaces within zone of security, governance, and trust



## Spaces empower users

- Sandbox environment
- Connect to data in central Space with new or 3<sup>rd</sup> party data
- Analyze, plan, predict
- Create Stories

3<sup>rd</sup> Party data loaded directly into spaces rather than being mixed outside the zone of trust

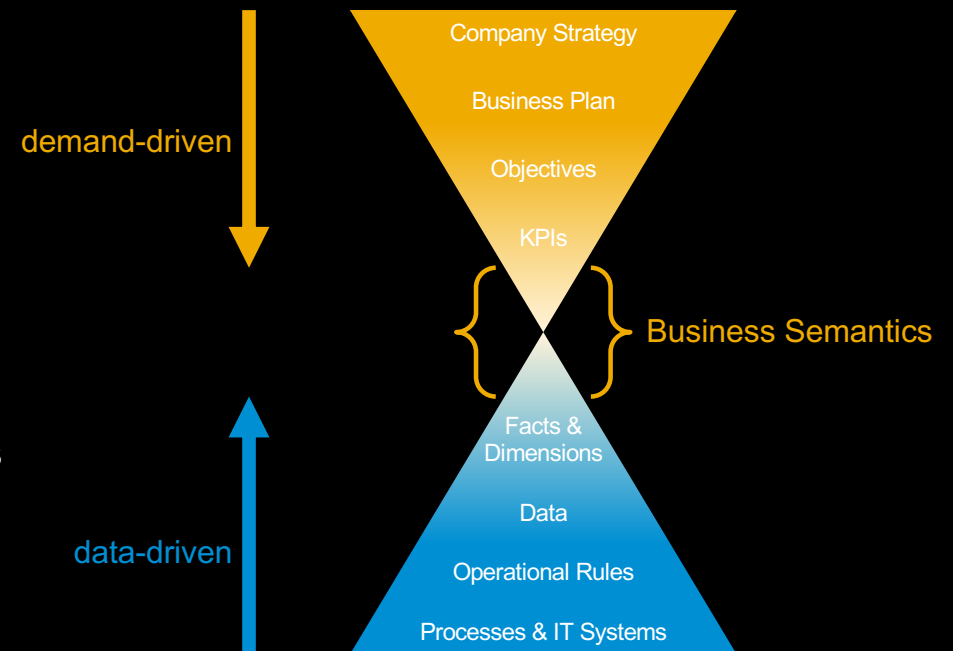
- |            |                |
|------------|----------------|
| ✓ ELASTIC  |                |
| ✓ SECURE   | ✓ SINGLE TRUTH |
| ✓ TRUSTED  | ✓ REPEATABLE   |
| ✓ GOVERNED | ✓ REAL-TIME    |

## Business Layer

### Statement of Direction

The business layer will enable BI analysts to model using business terminology and allow for **demand-driven & top-down modeling** in addition to **data-driven modeling**.

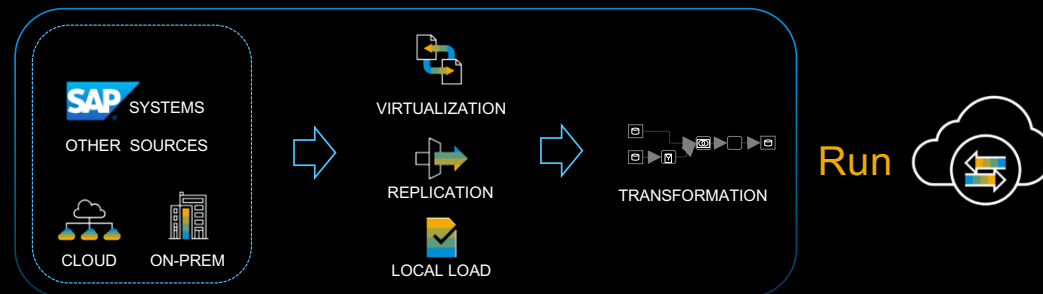
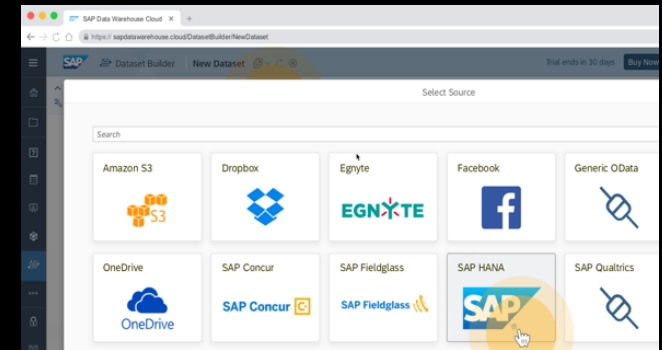
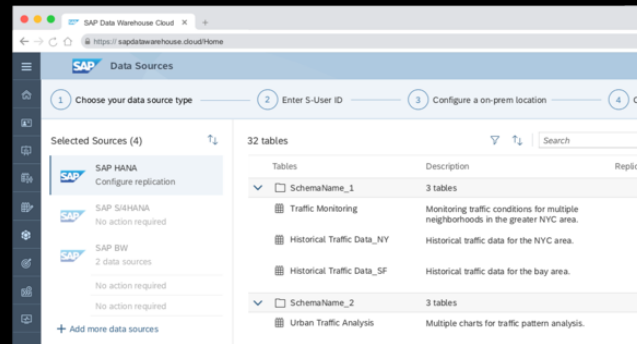
- Ensure one business layer object concept
  - Conceptual model of dimensions, analytical data sets, queries, calculated and restricted measures and hierarchies
- Act as contract and interface for consumption that abstracts from underlying data-layer
- Complement data-layer row level security by additional data restrictions depicting user responsibilities
- Enable governance on business entities (LoB driven)





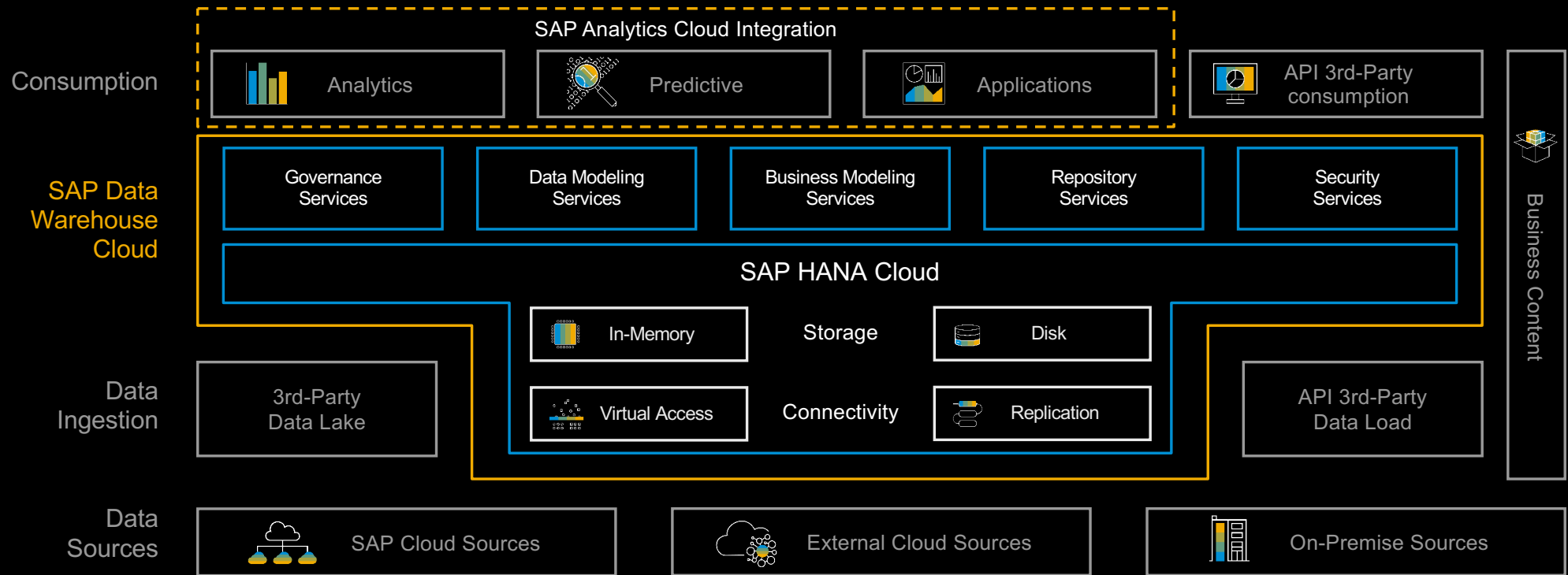
# Bring all your data together virtually regardless of who manages it or where it is stored

- Empower business users and administrators to easily leverage SAP & non-SAP data sources
- Easily mix cloud and on-premise data to discover new insights
- Connect data efficiently without copying it
- Open to 3<sup>rd</sup>-party tools for access to many data sources



Elastically connecting all data **efficiently and without unnecessary data duplications**

# Architecture



A comprehensive approach to data warehousing for instant data-to-value

# SAP Data Warehouse Cloud & SAP BW/4HANA

## Positioning

Ad-hoc data  
exploration



Powerful  
visualization



SAP Analytics

Intelligent  
augmentation



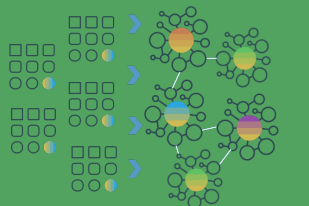
Business  
planning



### SAP Data Warehouse Cloud

Data Layer

Business Layer



- Public cloud, in-memory Data Warehouse service
- Self-service data modeling capabilities
- Extend and adapt enterprise data models
- Leverage SAP BW/4HANA meta data objects and semantics

### HYBRID

- Tight integration of on-prem scenarios like SAP S/4HANA or SAP BW/4HANA
- Extend on-prem data with cloud data to enhance models with local data for broader insights

### SAP BW/4HANA

- EDW application approach on-prem and private Cloud
- Agile Data Mart for LoB users in conjunction with SAP Data Warehouse Cloud
- A pre-packaged data warehousing solution
- Acting as enterprise-wide 'single-version of the truth'



**Comprehensive,  
integrated and  
packaged EDW  
toolset**

SAP S/4HANA



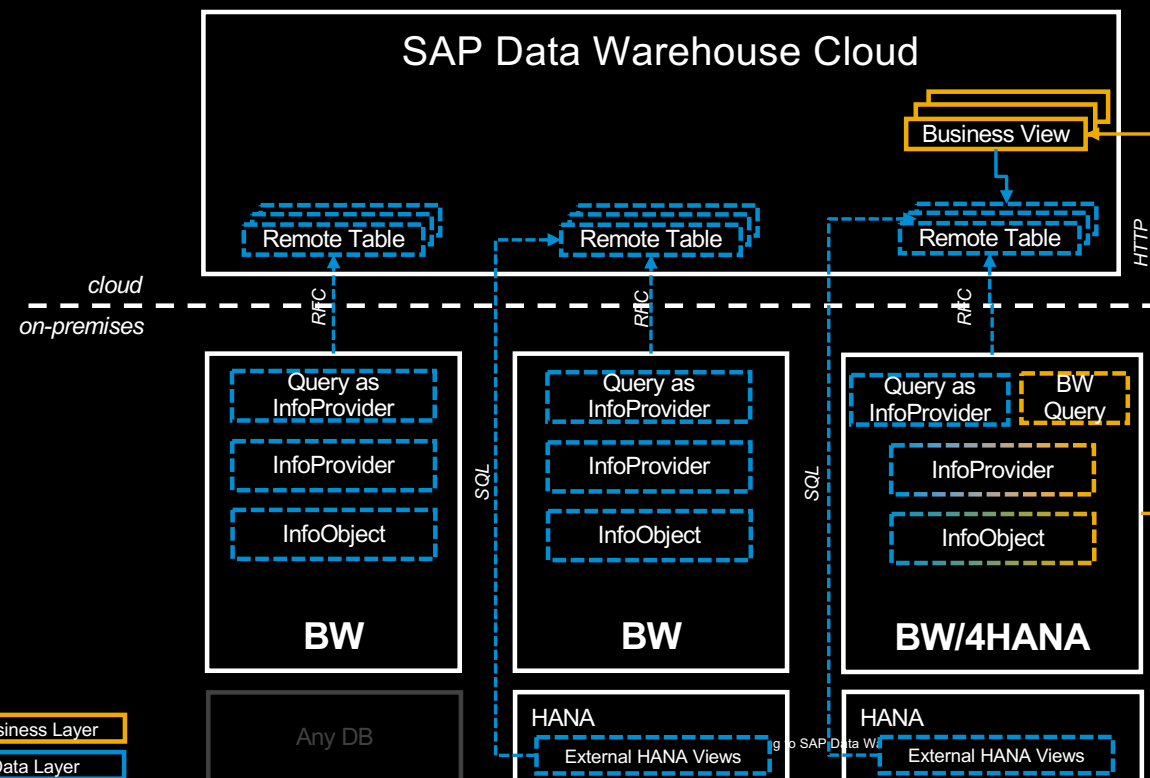
SAP SuccessFactors



## Data Sources & Ingestion: SAP BW Integration Overview



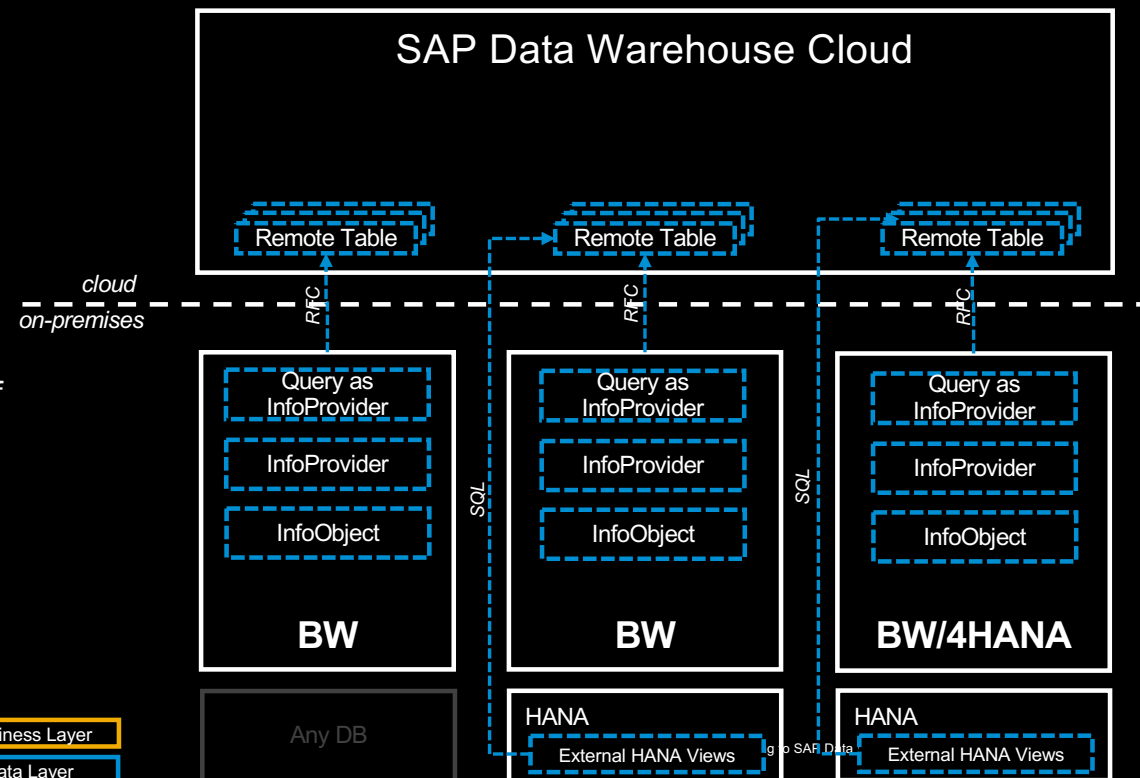
- Two different ways available for integrating SAP BW & SAP BW/4HANA systems:
  - Federated/replicated **data consumption scenarios** via
    - Operational Data Provisioning framework (SAP ABAP connection)
    - External SAP HANA Views (SAP HANA connection)
  - Federated/replicated **metadata model integration** scenarios via SAP BW/4HANA Model Transfer connection\*
- Differences in support of consumable entities, supported entity features, federated or replicated scenarios, location & usage of OLAP engine
- Remote or replicated data consumption scenarios supported with SAP BW & SAP BW/4HANA
- Metadata model migration support for SAP BW/4HANA only via SAP BW/4HANA Model Transfer connection\*



# SAP BW Integration: Virtual & Replicated Data Consumption Scenarios



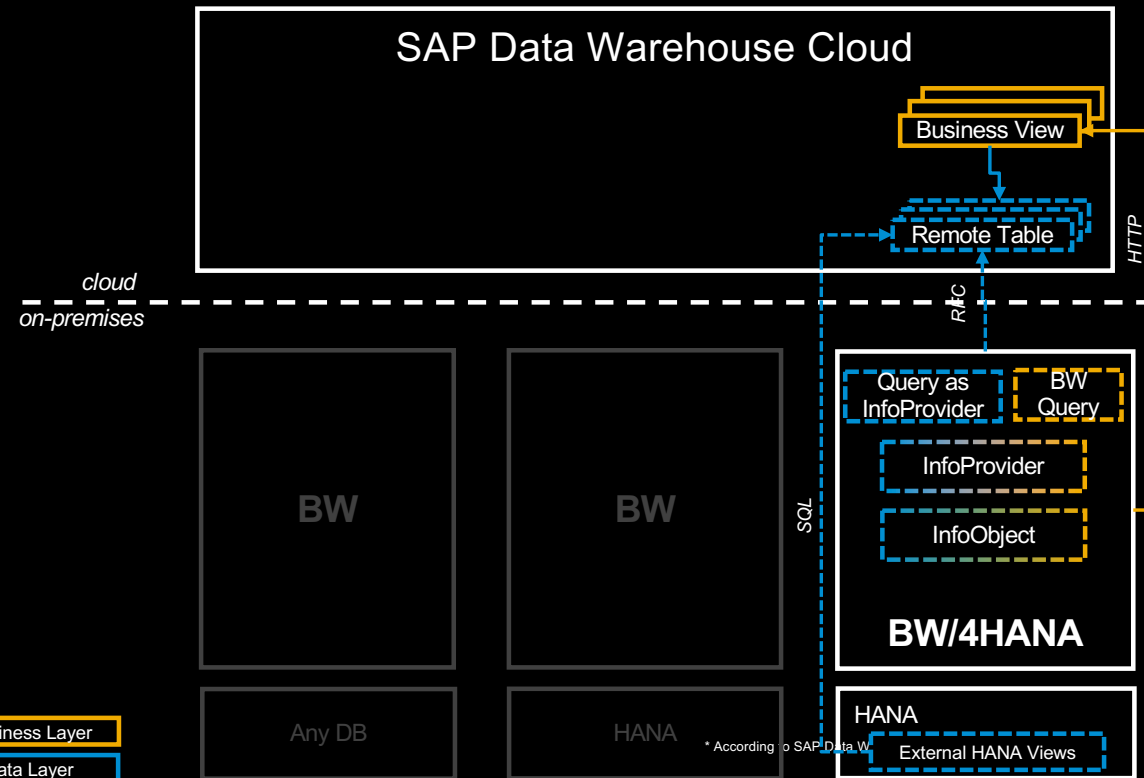
- Virtual or replicated data access available for InfoObject characteristics, InfoProviders, Query as InfoProviders (subset of OLAP capabilities), generated external SAP HANA views
- Connection via SAP ABAP adapter (Operational Data Provisioning framework) or SAP HANA connection
- Usable with any BW system that either supports the minimum Operational Data Provisioning framework requirements (ABAP connection) or runs on a SAP HANA database (SAP HANA connection)
- Replicated data consumption on data layer level, no migration of existing BW metadata to Data Warehouse Cloud native entities
- OLAP calculations done on BW side



# SAP BW Integration: SAP BW/4HANA Model Transfer Connection



- Provide SAP BW/4HANA metadata models to SAP Data Warehouse Cloud\*
- Enable staging scenarios for SAP BW/4HANA data & virtual models\*
- Transfer BW Query as native DWC entity (KPI, analytic model)\*
- Support BW Analysis Authorizations in SAP Data Warehouse Cloud\*
- Hierarchy Support (virtual, available via semantics, native SAP Data Warehouse Cloud dimension with hierarchies)\*
- SAP BW/4HANA system only acts remote data source, OLAP execution happens in SAP Data Warehouse Cloud



# Flexible and simplified package pricing or pay for what you use

Keeping you in control



## PREDICTABLE

Choose what you need and spend what you plan.



## FLEXIBLE

Start small and grow at your pace. Add remove, and reallocate resources as needed.



## TRANSPARENT

What you see is what you get, no hidden costs.



## SIMPLE

Get all the features you need in one package.

### BENEFITS

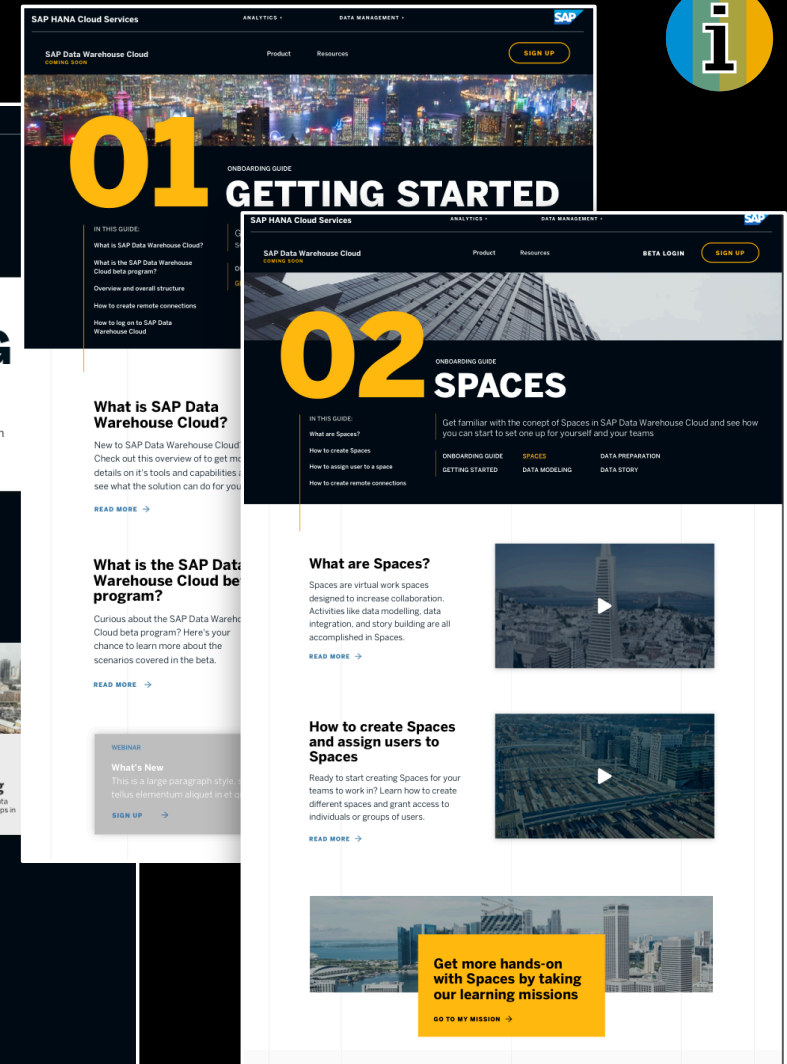
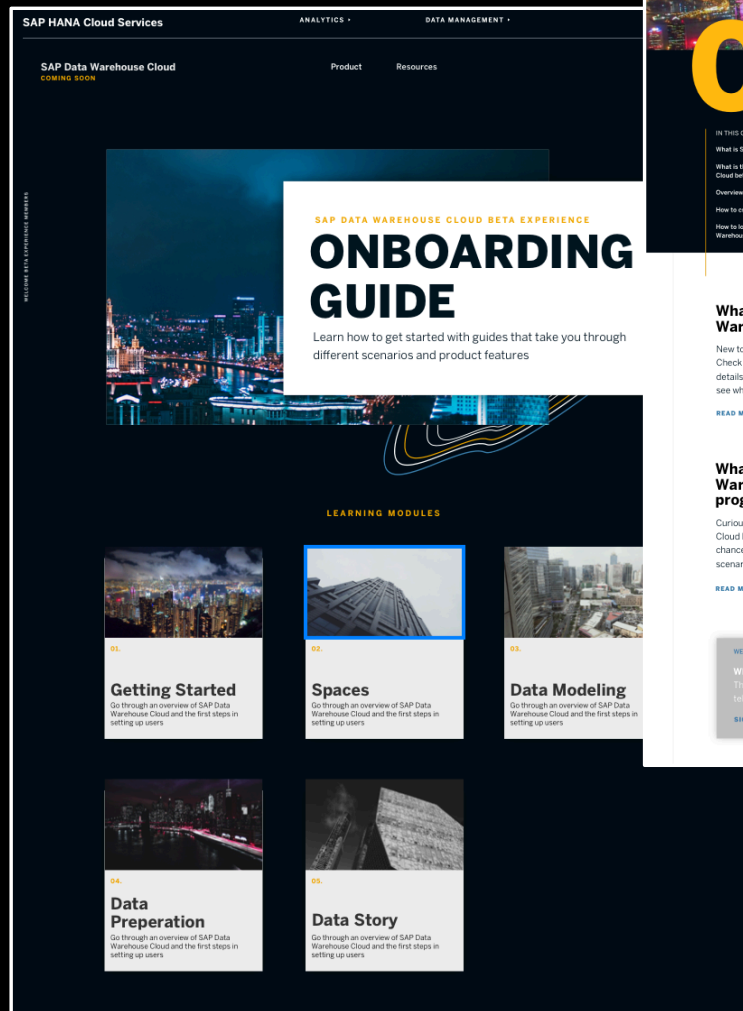
- Avoid surprises with clear terms and all-inclusive packaging
- Gain control into usage and consumption
- Avoid lock-in with flexibility on usage, terms, and spending

**One** product, **all** features with **total** cost transparency

# More Information about **SAP Data Warehouse Cloud**

Find out more at  
[www.sapdatawarehouse.cloud](https://www.sapdatawarehouse.cloud)

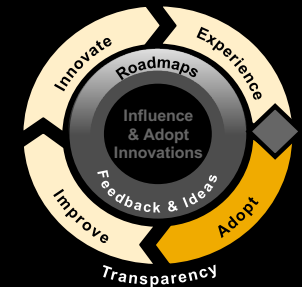
- **Onboarding Guide**
- **Free Trial**
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- **Community**
- **[SAP Help Documentation](#)**
- **[Calculator](#)**
- **Sample Content on [GitHub](#)**
- **Provide [your feedback](#):**





# Adopt Early Adopter Care Program Data Warehouse Cloud

Early Adopter Care\* enables customers to get support with your early implementation of SAP Data Warehouse Cloud via an Early Adoption Care program in close collaboration with SAP with a dedicated back-office support infrastructure in place to safeguard your project and minimize risks



## What is in for you?

- ❑ Preferred message handling
- ❑ Dedicated development contact and project coach who will stay in contact with the project lead
- ❑ 3 months FREE access to SAP Learning Hub (ALL content) for 5 users
- ❑ Option to influence direction of future releases with your feedback

## How to get engaged with us?

- ❑ Visit <https://influence.sap.com/sap/ino/#campaign/2004> and register your company for this opportunity

## Key Data

- ❑ Registration Start (at RTC): November 4, 2019

Further information: [Service Brief](#)

### Prerequisites:

Participation in the Early Adopter Care program is voluntary, at the sole discretion of SAP, and dependent on the following prerequisites:

- ❑ Valid Licenses
- ❑ Immediate desire to start a productive implementation
- ❑ Go-live within EAC program timeline
- ❑ Product fit

# Thank you. Ready for Hands-On?

SAP Data Warehouse Cloud

Product Management

## Hands-On (Optional)

**Modeling Hands-On:** Focuses on in-depth modeling activities

**Open SQL Schema Hands-On:** Focuses on exploring the Open SQL Schema capabilities

If you want to participate, send an e-mail to [jascha.kanngiesser@sap.com](mailto:jascha.kanngiesser@sap.com)