# Road Map and Overview on SAP's Overall Data Warehouse Strategy

Gordon Witzel, SAP

Jul-21



## **Disclaimer**

The information in this presentation is confidential and proprietary to SAP and may not be disclosed without the permission of SAP. Except for your obligation to protect confidential information, this presentation is not subject to your license agreement or any other service or subscription agreement with SAP. SAP has no obligation to pursue any course of business outlined in this presentation or any related document, or to develop or release any functionality mentioned therein.

This presentation, or any related document and SAP's strategy and possible future developments, products and or platforms directions and functionality are all subject to change and may be changed by SAP at any time for any reason without notice. The information in this presentation is not a commitment, promise or legal obligation to deliver any material, code or functionality. This presentation is provided without a warranty of any kind, either express or implied, including but not limited to, the implied warranties of merchantability, fitness for a particular purpose, or non-infringement. This presentation is for informational purposes and may not be incorporated into a contract. SAP assumes no responsibility for errors or omissions in this presentation, except if such damages were caused by SAP's intentional or gross negligence.

All forward-looking statements are subject to various risks and uncertainties that could cause actual results to differ materially from expectations. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of their dates, and they should not be relied upon in making purchasing decisions.

## SAP Data Warehousing Strategy & Roadmap

Feedback shows both SAP DW's innovative strength and questions



#### **Cloud-based innovation**

Traction of SAP Data Warehouse Cloud Adoption & Innovation



#### Way forward

High share of SAP EDW customers not yet migrated to SAP BW/4HANA – majority on 7.5 on HANA<sup>1</sup>



#### **Upgrade decision**

Upgrade plans require transparency on future positioning & investment

1 DSAG Positioning Paper "BW/4HANA", May 2021

## SAP Data Warehousing Strategy & Roadmap Today we address our key innovation topics & plans



#### **Strategic Innovation**

Major innovation topics planned for SAP Data Warehousing





#### **SAP Data Warehousing Portfolio**

Way forward to enable cloud-based innovation for SAP BW on HANA & SAP BW/4HANA customers





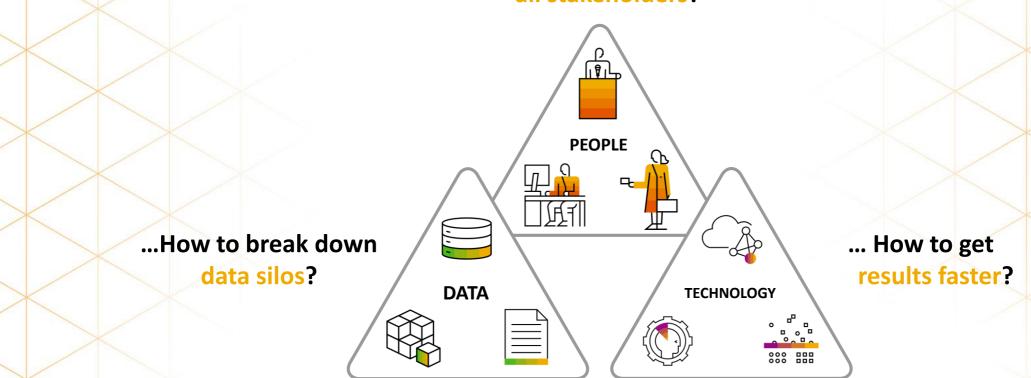
#### **Plans & Priorities**

Outlook on investment areas and future priorities



## **The Challenge: Data and Analytics**

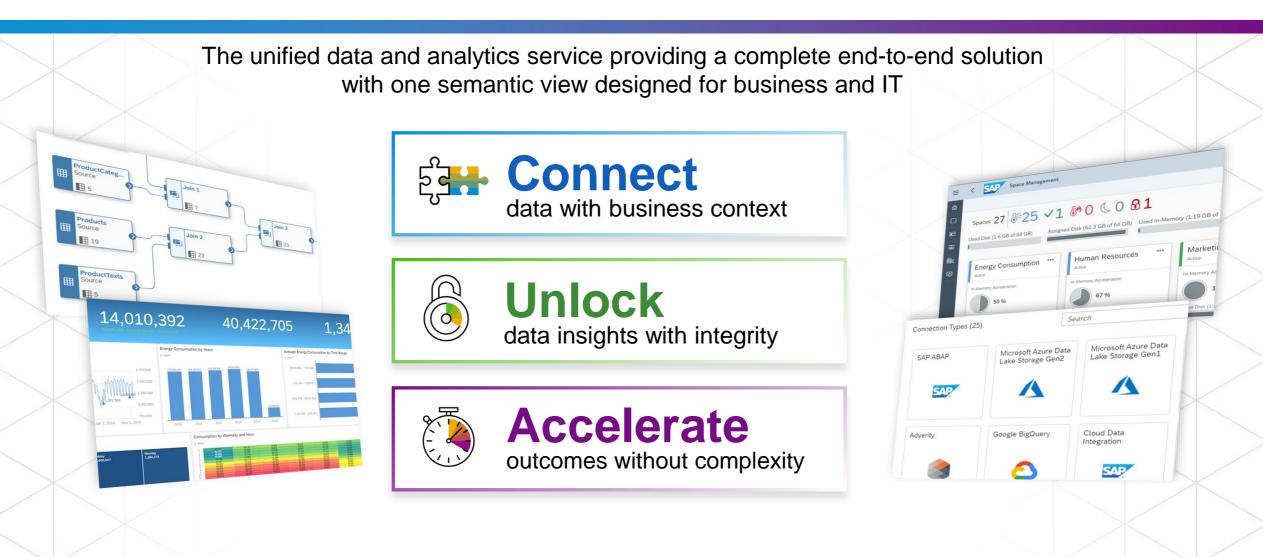
...How to empower all stakeholders?





## **SAP Data Warehouse Cloud**

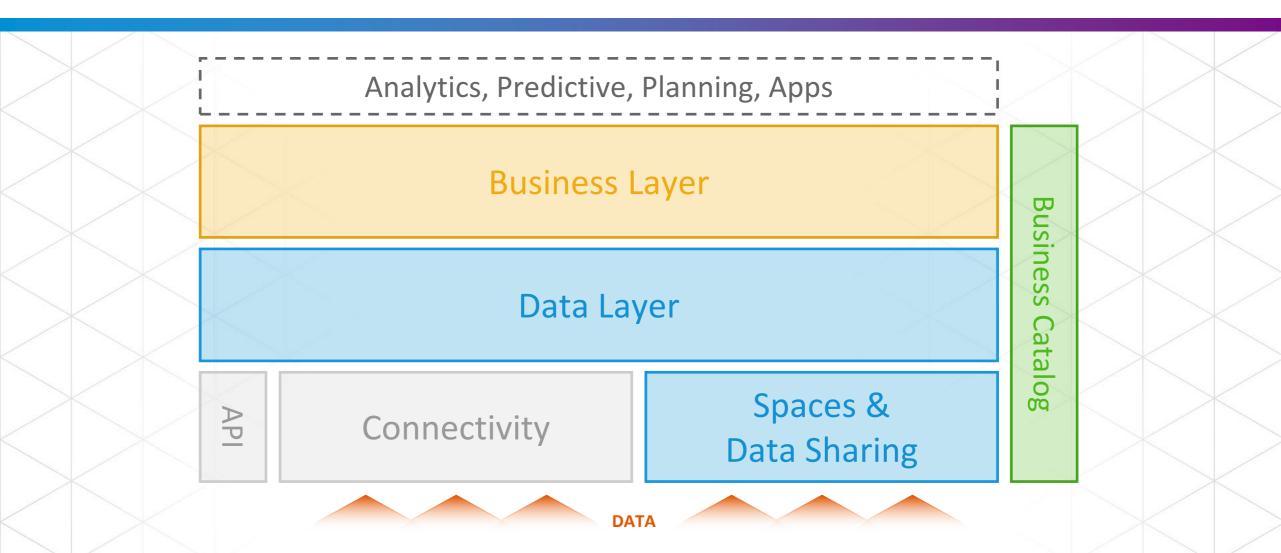
## **Unleash the data-driven business**





## **SAP Data Warehouse Cloud**

**Overview of key capabilities** 

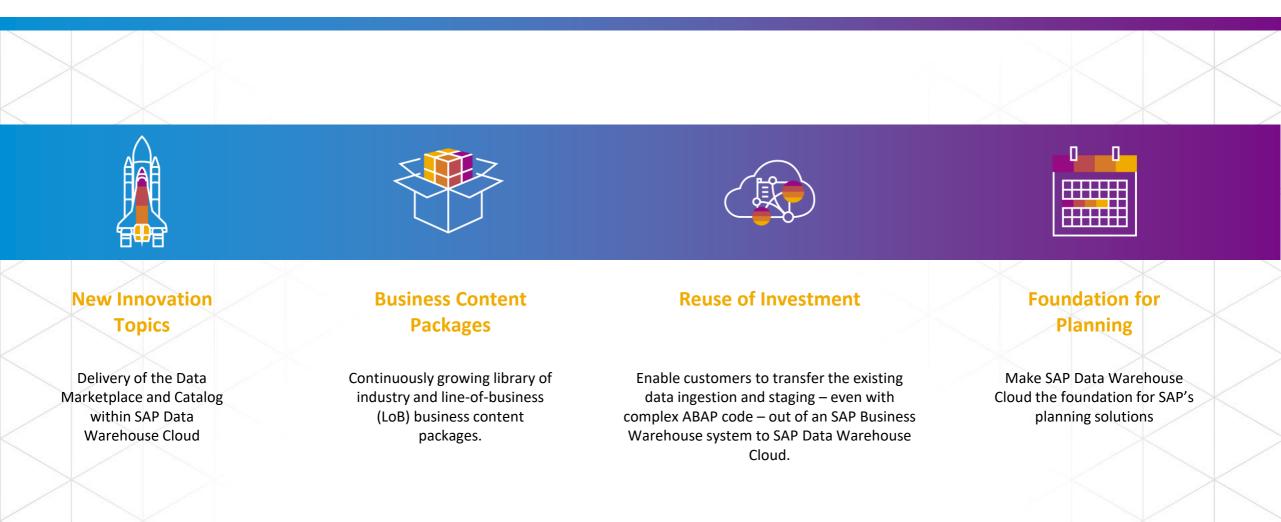




## SAP Data Warehouse Cloud Recent Innovations Selected highlights of Q2 2021 innovations

	SAP RO	ad Map Explorer Prod	lucts Processes Industries	My Road Maps 🛛 🖂 Disclaime	r	
	SAP Data Wa	e ×		92 Innovations $\times Q$		
	Products 🕘 🕥	Industries V Focus Topics V		Current - Latest 🕮 👤 😋 🖾 Save	I	
Q2 2021 CURRENT 14 Innovations X K →	Q3 2021 11 Innovations X KH Future Release	Q4 2021 22 Innovations X K>	Q1 2022 22 Innovations X K>I	Q2 2022 11 Innovations X IC	2022 10 Innovations         X         K−         →I         2023 2 Innovations           Product Vision         Product Vision         Product Vision         Product Vision	
∧ Administration and Service Management	∧ Administration and Service Management	∧ Administration and Service Management	∧ Administration and Service Management	∧ Administration and Service Management	A Data Center Availability     A Data Center Availability	
Accessibility improvements: home and shell	Flexible Tenant Configuration	Built-in help: enhanced Web assistance	Theming support	Built-in support	Data center availability in the United Data center availability in the As States through Google Cloud Pacific region through Google Cl	
SAP Data Warehouse Cloud 1.0	SAP Data Warehouse Cloud	SAP Data Warehouse Cloud	SAP Data Warehouse Cloud	SAP Data Warehouse Cloud	SAP Data Warehouse Cloud  V SAP Data Warehouse Cloud	
ISO and SOC certification	∧ Data Integration	Flexible Tenant Configuration: Self- service for scale-up and down	∧ Business Modeling	∧ Business Modeling	Data center availability with EU access service in Switzerland European region through	
SAP Data Warehouse Cloud	Data Flow: Connection to (S)FTP- based file shares	SAP Data Warehouse Cloud	Key performance indicators	Workflow Management	SAP Data Warehouse Cloud SAP Data Warehouse Cloud	)
SAP HANA cloud cockpit integration	SAP Data Warehouse Cloud	∧ Business Modeling	SAP Data Warehouse Cloud	SAP Data Warehouse Cloud	∧ Data Integration	
SAP Data Warehouse Cloud 1.0	Data marketplace (beta)	Create cube builder	Multilingual content support	∧ Data Integration	Support external hierarchies for SAP BW/4HANA	
∧ Business Modeling	SAP Data Warehouse Cloud	SAP Data Warehouse Cloud	SAP Data Warehouse Cloud	Input parameters for sources for SAP S/4HANA (integration of SAP	SAP Data Warehouse Cloud	
				SAP Data Warehouse Cloud		×
* * * * * * * * * * * * * * * *					To learn more, <u>register for our</u> <u>webinar</u> "What's New in SAP Data Warehouse Cloud in Q2 2021" -	
Open Connectors	Input Parameters	Geo Enrichment	Text Association	New Data Centers	July 14, 5pm CET	

## **SAP Data Warehousing Recent Innovations SAPPHIRE announcements & upcoming product capabilities**





## Data Marketplace for SAP Data Warehouse Cloud Integrate external data for innovation in clicks – not projects

#### ...changes to the next level of data access. From the bitter reality today ... With the data marketplace for SAP Data Warehouse Cloud, they can SAP Data Warehouse Cloud users – especially in the Line of find, unlock & access CONFIDENTIAL - DO NOT DISTRIBUTE data t R U S 1 Business – love the freedom & agility of Spaces. But when in an integrated & enterprise-grade fashion. they want to add an outside-in perspective to their spaces ... Ο Sole Customer **Data Marketplace** Dashboard SALES MKTG Responsibility & Silo Apps SPACE SPACE CENTRAL Technical Enterprise-grade Data Sharing & Monetization COMPANY Interfaces DATA SPACE Ο draas down C Flat Files & **Data Sharing Cockpit** data value Data Lakes R&D FIN SPACE SPACE **STANDARDIZATION – Unified & Automated Ingestion** TIME-2-USAGE - individual solution for for harmonization cases at SAP customers the specific customer scenario TIME-TO-VALUE – Start CONFIDENTIAL - DO NOT DISTRIBUTE data **ADOPTION RISK** - friction due to export & import journey in operations that keeps users from integration clicks. Scale into any LoB for differentiated data. **BUDGET IMPACT** – integration work cannibalizes budget **COST SAVINGS** – Centralize Data Purchasing for low value creation & low scalability in return through streamlined & transparent inbound process

## **One Catalog Vision**

## A single view across data assets for transparency & collaboration

≡ <b>SAP</b> ⊂ ⇔ ★	ttalog Central What are you looking for?	Enterprise Catalog Central access point to find all your business data from SAP and other systems.		SAP Analytics Cloud Assets	- Measures, Dimensions, Filters, Rows, Columns, Object types, - Underlying data tables - 3 <sup>rd</sup> Party Reports (same pattern)
	Crontent Content Crontent Crontent Crontent Crontent Crontent Story Sales analysis compared to significant events in the cycling industry. (4.432 G.2 (2.4))	Assets 180 Datasets and Models 170 Busine Employee Hiring Rate Remote Table Hiring rate based to office location and job function compared to other competitors within each region. 121 122 122 122 122 122 122 122 122 122	Expenses Model     Model     Expenses model from Concur employee expenses for the er	SAP Data Warehouse Cloud Assets	- Spaces, Tables, Views, Columns, Data Types, ER Models, Data Flows, Data Builder Objects, Descriptions - Business Builder Objects, Dimensions, Analytical Datasets. Fact Models, Consumption Models - Glossary (KPI Definitions, Entity Definitions, Measure Definitions
	Recommended	Table Name Remote Table Bikes, Time, Customers, Geography compared to Units sold.		SAP Data Intelligence Assets	- Data Flows (Pipelines) ETL Jobs, DQ Rules, Transformations, - Tables, Views, Schemas, Sources, Columns, Data Types, - Glossary Terms (Data Stewards )
	Marketing	Table Name Remote Table Bikes, Time, Customers, Geography compared to Units sold.	Model Name Remote Table Bikes, Time, Customers, Geog Units sold.	Other Assets	- Purpose of Use, Authorizations,

A unified enterprise catalog across SAP Data Warehouse Cloud, Data Intelligence & Analytics Cloud helps customers organize for #GenerationData



## Future SAP Data Warehousing Portfolio Customer journeys and considerations



**On-premise** 

Continue with SAP BW & BW/4HANA onpremise

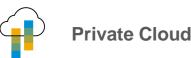


Hybrid

Retain SAP BW or SAP BW/4HANA and combine with SAP Data Warehouse Cloud – especially in case that full public cloud SaaS offering is not relevant (today) or gradual transition is preferred SAP Data Warehouse Cloud SAP BW and SAP BW/4HANA

SAP BW and SAP BW/4HANA

(on-premise)



Shift the existing SAP Business Warehouse (SAP BW) application to the private cloud – for customers that prefer continuing with their established SAP BW or SAP BW/4HANA system SAP BW and SAP BW/4HANA (private cloud)



#### **Public cloud**

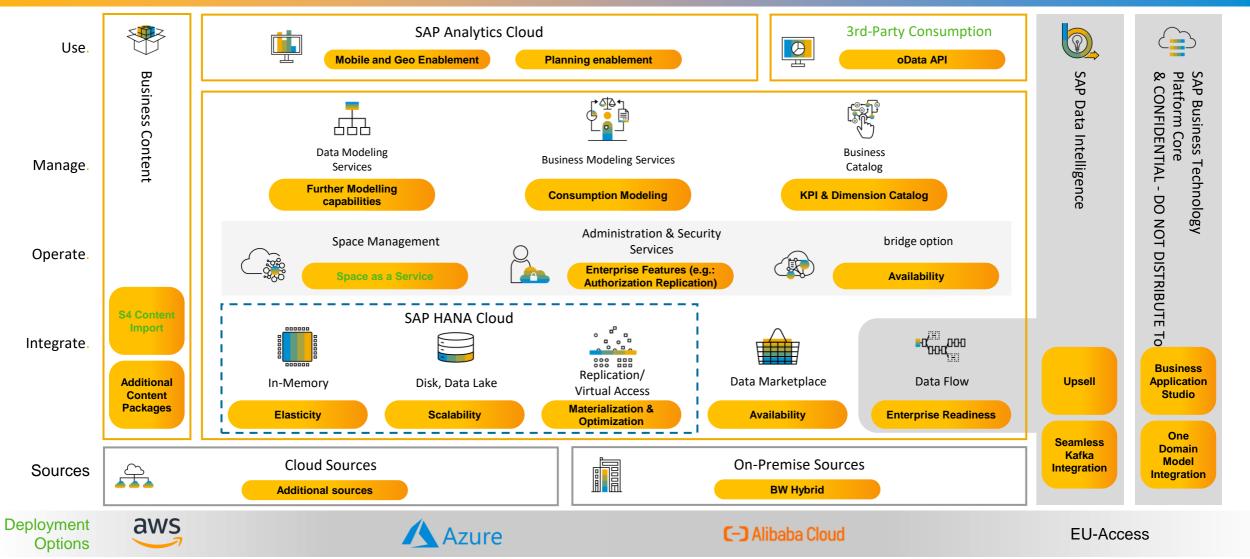
Modernize and innovate with SAP's latest SaaS data warehousing solution; reuse & migrate existing data and models; can be combined with hybrid scenario

SAP Data Warehouse Cloud

New reuse & integration capability



## SAP Data Warehouse Cloud Main Investment Areas 2021





		2021	2022
(F)	Data Tiering Optimization (DTO) & DataStore Object (DSO)	<ul> <li>Cold store for DSOs without activation</li> <li>Exceptional Updates for cube-like DSOs</li> <li>Support for smaller data chunks (than partition) to optimize performance of load to cold store</li> <li>Performance Optimization of DSO Activation</li> </ul>	<ul> <li>NSE for Scale-Out</li> <li>SAP HANA Data lake ("IQaaS") as cold storage location</li> <li>Selective Deletion on cold store</li> </ul>
	Process Chain Administration	Enhancements in Alerting	Further Enhancements in Administration
	Features of New ABAP Basis	<ul> <li>New ABAP DDIC types (DATS, TIMS) in SAP BW/4HANA objects (Field- based DSO)</li> </ul>	ABAP SQL on BW generated CDS Views
	Hybrid Scenarios	<ul> <li>BW/4HANA model transfer</li> <li>Enabling BW Query Features in SAP Data Warehouse Cloud</li> </ul>	BW/4 HANA Model Transfer Enhanced
6	Data Protection Workbench	Enhancements in Automation	Further Enhancements in Automation and smart Maintenance
<b>R</b>	Miscellaneous	RSPM Archiving	

## Key Takeaways

## High pace of innovation in SAP DWC & seamless migration path



#### **High Pace of Innovation**

Data Marketplace One Catalog Business Content Planning Foundation S/4 Content Import



#### **Seamless Migration Path**

Integration & re-use of SAP BW and SAP BW/4HANA systems' data ingestion and staging in SAP DWC



#### **Clear Roadmap**

From enterprise readiness to differentiating innovation

## **SAP Data Warehousing**

Statement of Direction

SAP continues to innovate industry-leading data warehousing technologies to enable the Intelligent Enterprise.

SAP Data Warehouse Cloud is our strategic offering for data warehousing in the public cloud – it can be a stand-alone solution or complement the data warehouse portfolio of SAP by extending current use cases.



#### **ON-PREMISES & PRIVATE CLOUD**

SAP HANA FOR SQL DATA WAREHOUSING

SAP BW/4HANA and SAP HANA for SQL data warehousing are SAP's strategic solutions for onpremises and private cloud data warehousing. Customers with SAP BW as strategic asset benefit from investment protection and future improvements associated with SAP BW/4HANA core functionalities.



**HYBRID** 

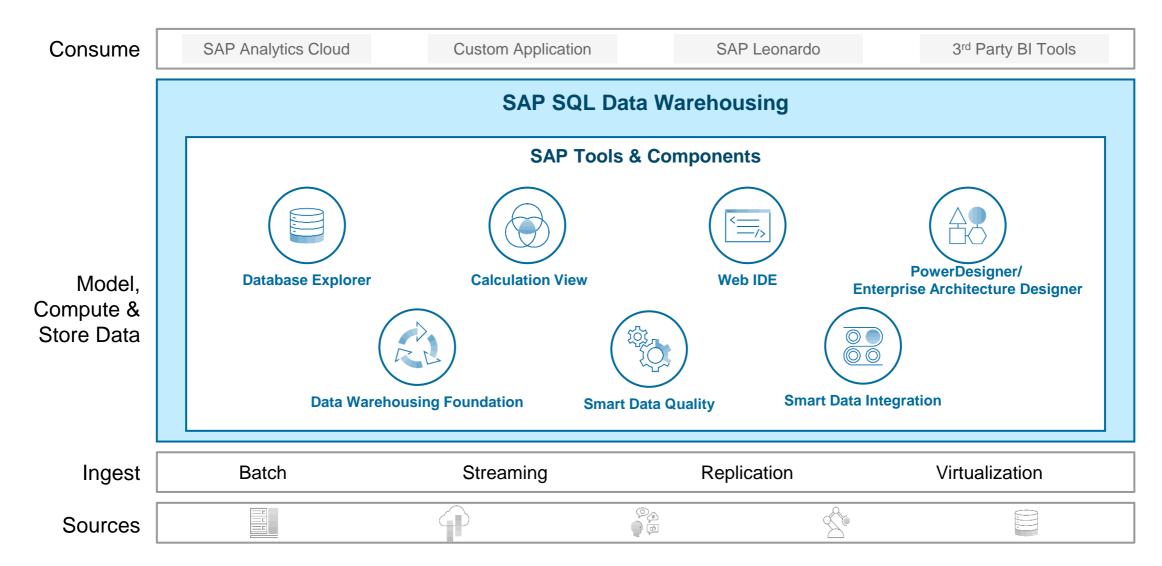
The hybrid option enables customers to combine the strengths of the on-prem and private cloud assets with the innovation, openness, and self-service abilities of SAP Data Warehouse Cloud and provides an organic transition path to the public cloud.



SAP Data Warehouse Cloud is our strategic public cloud product for data warehousing. It improves agility, accelerates time-to-value and unlocks innovation with unprecedented business user enablement, a new form of openness, and embedded partner offerings.

## **SAP SQL Data Warehousing**

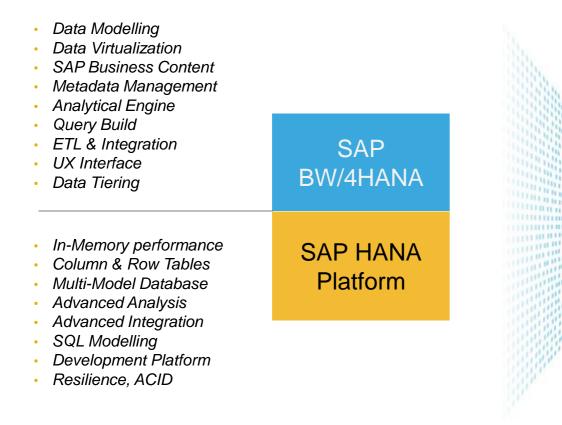
Tools & Components



## **SAP BW/4HANA 2.0**



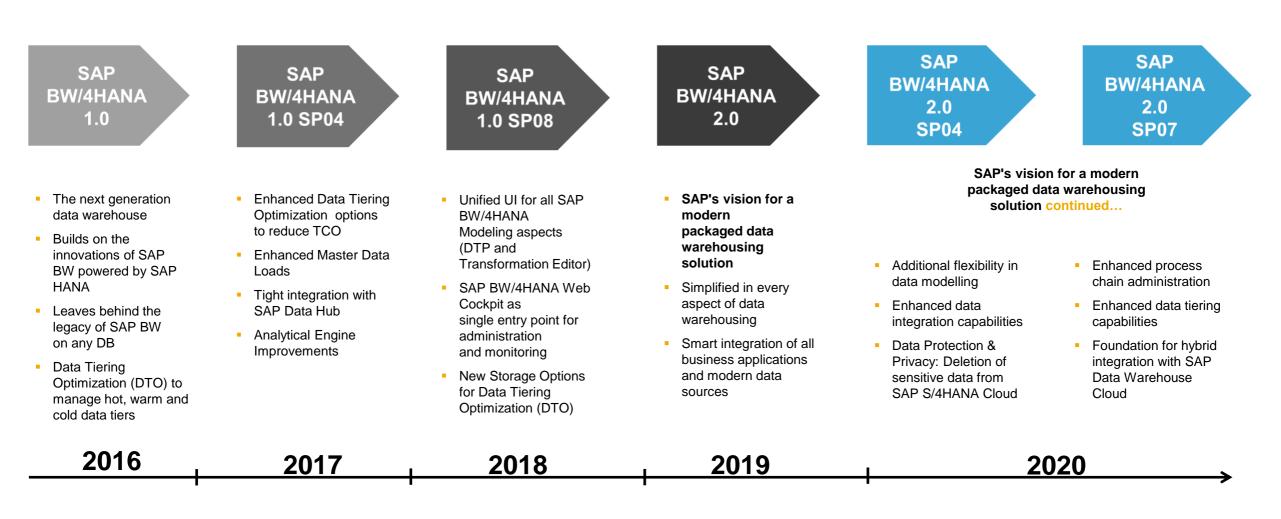
## **SAP BW/4HANA – The Next Generation Enterprise Data Warehouse**



- Packaged data warehousing solution built natively on SAP HANA Data Warehousing capabilities
- Completely overhauled, HANA Optimized Business Content with new delivery infrastructure
- No Code/Low Code application for SAP HANA 2.0
- Improved, unified data platform running on SAP HANA
- Realtime, Near Realtime, packaged extraction from SAP ERP
- Significant reduction in effort/complexity over previous releases
- Supported through 2040 with S/4HANA ... see link <u>here</u>

## Fully Loaded Enterprise Data Warehousing Solution

## SAP BW/4HANA – The Evolution From SAP BW/4HANA 1.0 to 2.0



## SAP BW/4HANA – Customers



"Our SAP BW/4HANA conversion has laid the foundation for modern analytics with a modern data warehouse and the ability to analyze both structured and unstructured data."



"The move to SAP S/4HANA and SAP BW/4HANA is key to our digital transformation strategy. From planning to migration to going live, SAP Services and Support helped ensure our success."



"We want to make sure our appearance to and interaction with customers is highly individual while at the same time having 100% process standardization."



Alan Jensen · 2. 3 Monate • 🚯

CIO and Senior Vice President Salling Group

One of the world's largest SAP BI in Retail, is now moved to the new SAP BW/4 Hana platform. So proud to see how my team in Salling Group IT this weekend have succeeded to migrate our SAP BI platform successfully to SAP's newest technology, BW/ 4 HANA. This was done in a strong cooperation #retail #sap #innovation with SAP, Itelligence, IBM and HPE. This was the first step in our IT strategy, to modernize and move our core SAP platforms, to the new SAP S/4 HANA technology. A continuation of our core IT strategy: One system, one process, one template and one data truth across all Business Units and countries. Supporting Salling Groups Digital journey.

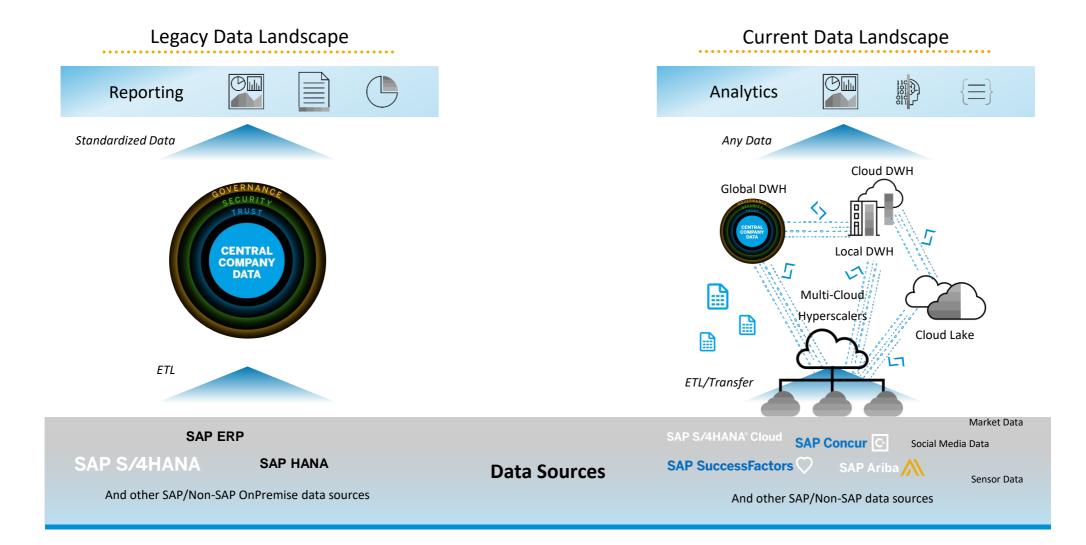
#### Übersetzung anzeigen



## **SAP Data Warehouse Cloud**



### And it Gets Even More Complex with Heterogeneous data landscapes



## **SAP Data Warehouse Cloud Key Capabilities**

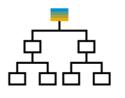


Spaces Control compute & storage resources Cross-Space Sharing of Data Spaces for Business Users & central IT



#### **Out-of-the-Box Access**

Federated & Replicated Data Access Connecting to SAP & non-SAP data sources Partner Connectivity



#### **Data Modeling**

Data Builder & E/R Modeler Data Flow Transformations & Scheduling Advanced Modeling Features



#### **Business Modeling**

Self-service modeling for LoBs Model in non-tech business language Business layer independent from data layer



#### Hybrid BW & SQL Integration

Reuse investment in BW or HANA SQL Use external Modeling IDEs in Open SQL Schema Leverage BW semantics & data



#### **Business Catalog**

Common Repository across Spaces Integration of Analytic Content Network Data lineage for impact analysis



#### **Governance & Administration**

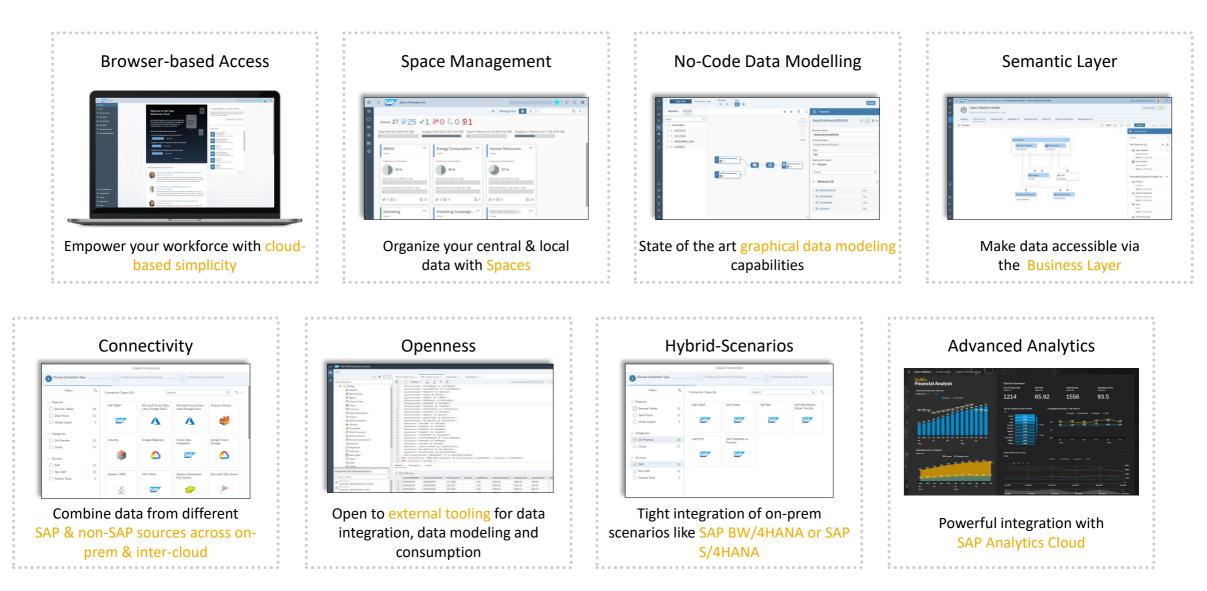
Security, User & Role Management Remote Table & Data Flow Monitoring Multi-Language, Auditing, Administration



#### Consumption

Built-in SAC Integration SAC Story Builder and Data Explorer 3<sup>rd</sup> Party SQL Interface

## SAP Data Warehouse Cloud. Selected Powerful Features



### More Information about SAP Data Warehouse Cloud

Find out more at www.sapdatawarehouse.cloud

- **Onboarding Guide**
- Learning Academy
- Blogs

**SAP Help Documentation** 

Calculator

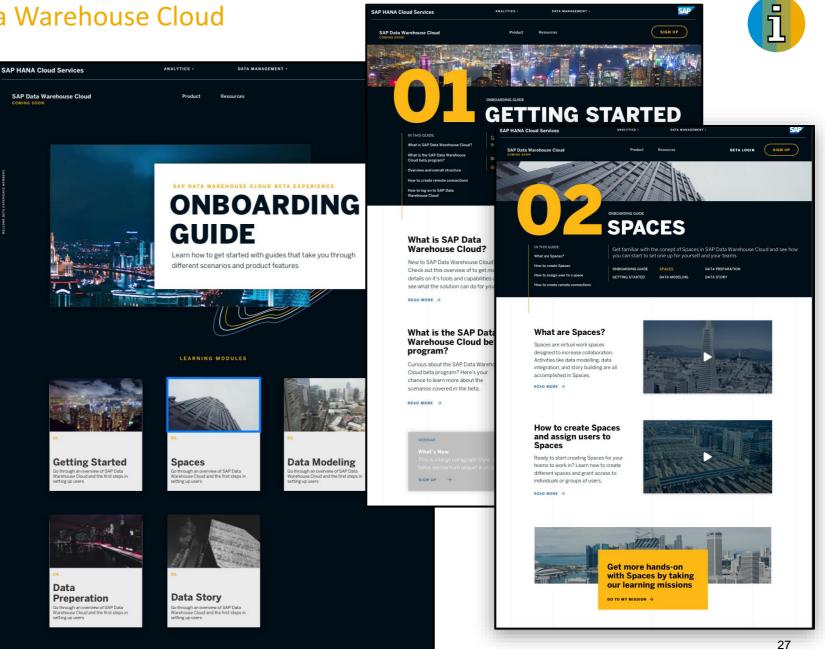
SAP Road Map Explorer

**SAP Community** 

Sample Content on GitHub

Provide your feedback:





# Thank you.

Gordon Witzel Product Management SAP Data Warehousing gordon.witzel@sap.com

