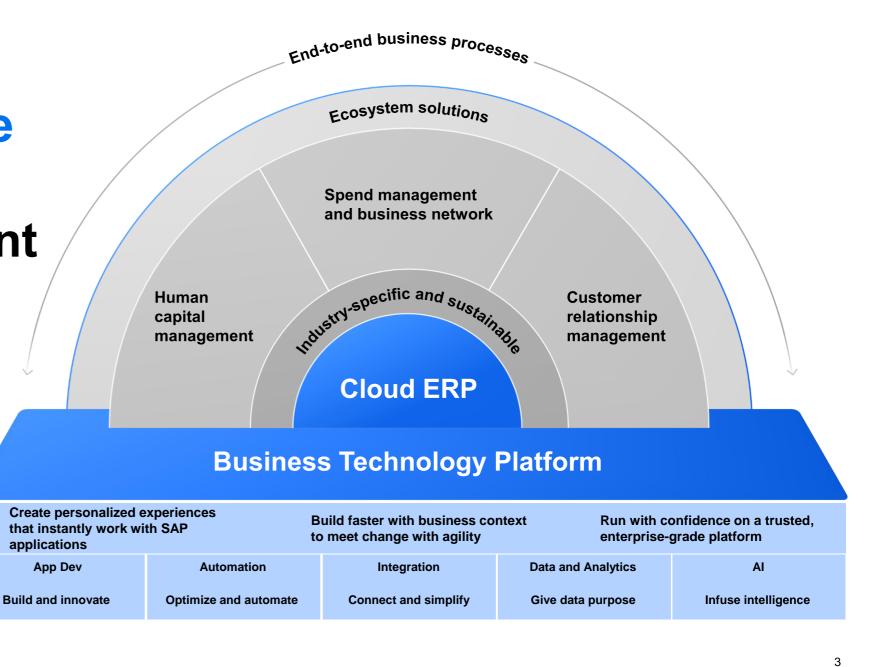


SAP DatasphereUnleash the power of business data

Florian Neukirch, SAP



SAP BTP is the foundation of the Intelligent **Sustainable Enterprise**



Public

applications

App Dev

Data needs context for authoritative decision-making

Innovation has happened in silos

Data, especially metadata, has been removed from its context

There's been a fundamental error—focusing solely on technology rather than the data

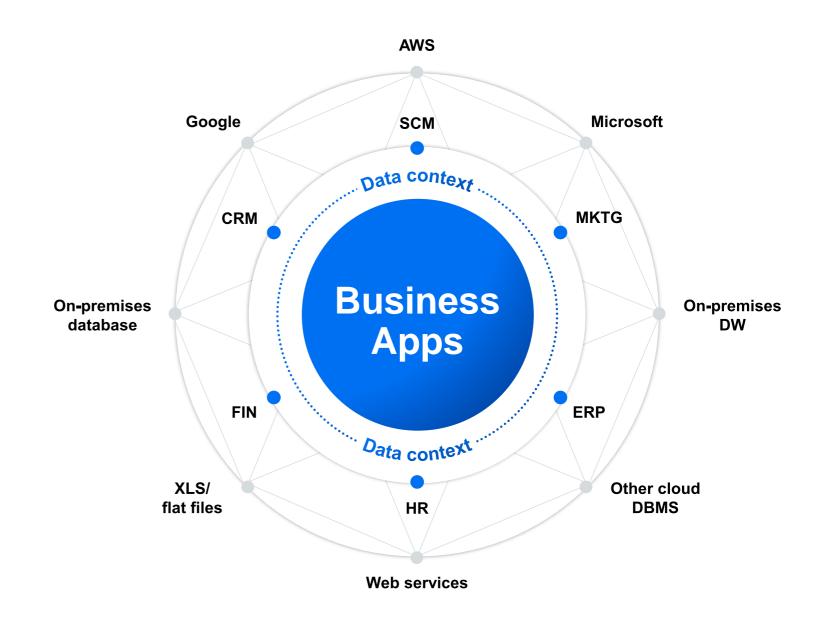


(Multi-) cloud brings new opportunities and challenges

New data sets spawn new projects

On-premises sources remain

Complexity has increased, shifting governance and integration work back to customers



Universal yet opposing data needs for business and technology stakeholders



SAP Datasphere is the foundation for a business data fabric architecture

Data consumers

Planning and analytics

Intelligent data apps

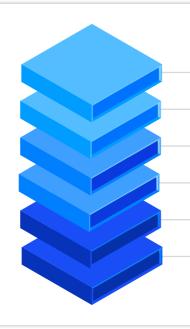
Data science

SAP Datasphere running **SAP BTP**

Security

Access control

Availability



Self-service data access | Virtual data products

Data discovery | Business content, data marketplace, recommendation

Orchestration | Data transformation and data ops

Processing and persistency | Warehousing, business semantics (analytic/relational models), knowledge graph

Data governance | Metadata management, catalog, lineage, privacy, quality

Data ingestion | Data replication, data federation, real-time, application integration

SAP and non-SAP data

Applications

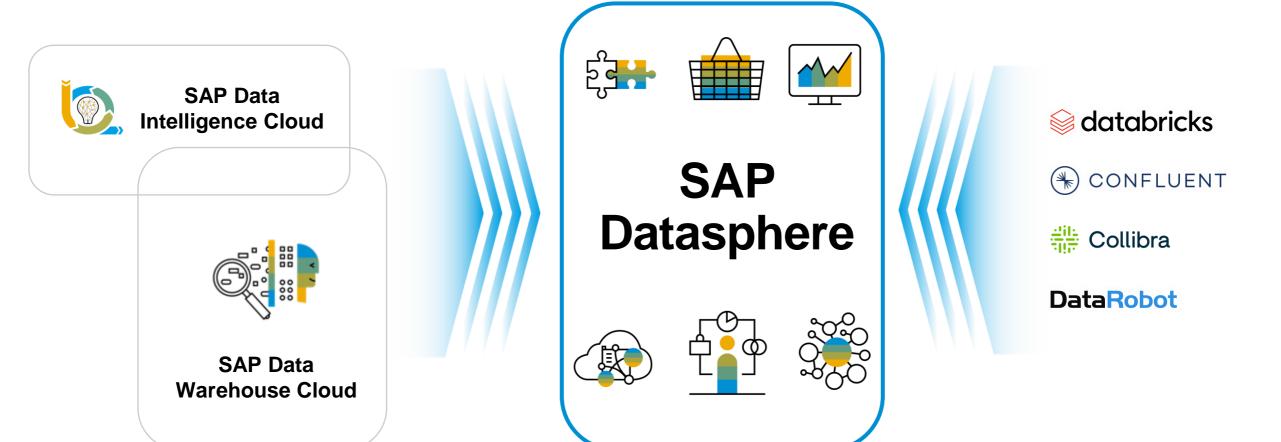
On-premises
Data Warehouses

Cloud Data Warehouses and Lakehouses

Relational Databases

Unstructured/
Semi-structured Data

SAP Datasphere as a business data fabric



SAP Datasphere is the foundation for a business data fabric architecture

Existing SAP Data Warehouse Cloud customers got automatically moved to SAP Datasphere and benefit from the new functionality



SAP Connectivity
Connecting SAP sources
with business context



Openness
Multi-cloud support & open interfaces



Modern Data Exchange SAP Data Marketplace



Self-Service
Collaboration
Business user modeling
& Space concept



E2E Analytics & Planning SAP Analytics Cloud Integration



Investment Re-Use & Extension SAP BW Bridge



Out-of-the-Box
Use Cases
Business Content by
SAP & Partners



Cloud-based Data Replication Replication Flow

NEW



Efficient Semantic Modeling Analytic Model

NEW



SAP Datasphere Analytic Model

Multi-dimensional and semantically rich analytical modelling to answer business questions easier, faster and more efficiently



Model

The Analytic Model allows multidimensional and rich analytical modelling with less effort to answer business questions easier, faster and more efficiently



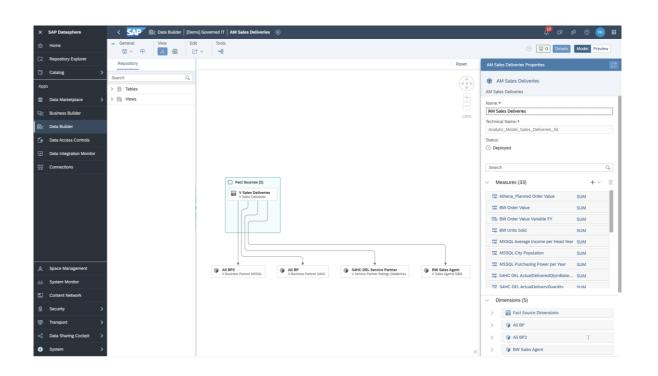
Preview

The Analytic Model data offers an **analytical preview** incl. filtering, pivoting, hierarchies, etc. to analyze data directly in SAP Datasphere



Full integration with SAP Analytics Cloud

The Analytic Model in SAP Datasphere is also **seamlessly integrated** with SAP Analytics Cloud to analyze data in a hassle-free manner.



SAP Datasphere Catalog enabling governance

Unlock metadata integration and crawling with SAP sources while having tight integration to 3rd parties.



Discover

Discover data (*crawl*, *profile*, *organize*, *link*, and *enrich*) and make data **accessible** (*browse*, *search*)



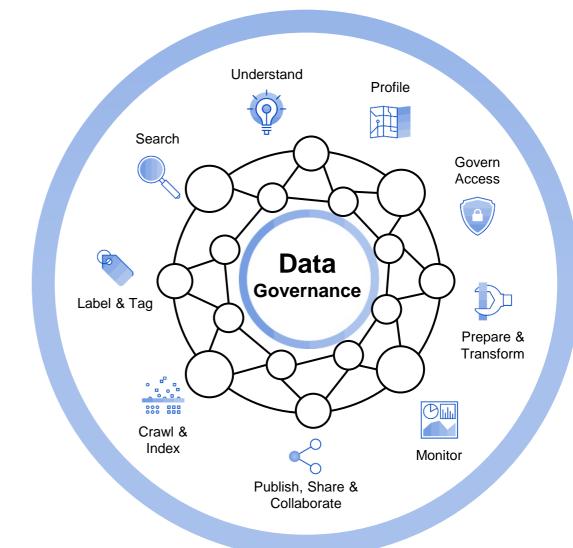
Organize

Classify, organize, and understand data (location, attributes, quality, lineage, sensitivity)



Curate

Enforce centralized authorization and security for data orchestration, and control data quality standards



SAP Datasphere Replication Flow

Replication Flows offer a cloud-based replication tool in which for cloud-to-cloud based replication scenarios on premise components are not needed anymore (e.g. Data Provisioning Agent)

Cloud & on-Premise

SAP Business Suite

SAP HANA

Cloud & on-Premise

SAP BW & BW/4HANA

MS Azure SQL



Mass Data Replication

Possibility to replicate **parallelized** data from supported **source systems** into supported **target systems**



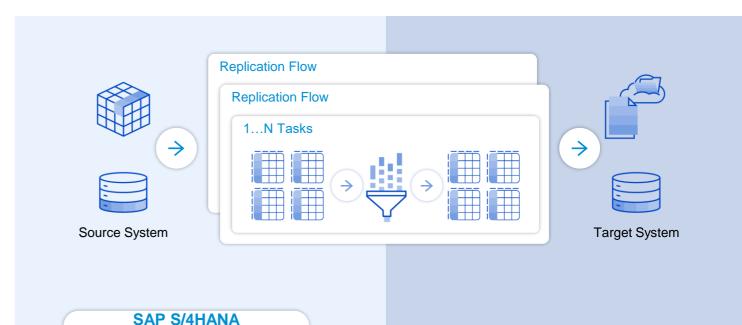
Integrated Monitoring

Overview of monitoring features within **integrated** monitoring application



Capture changes

Support for **initial** data replications together with **delta** replications



INTERNAL - SAP Only

SAP Datasphere

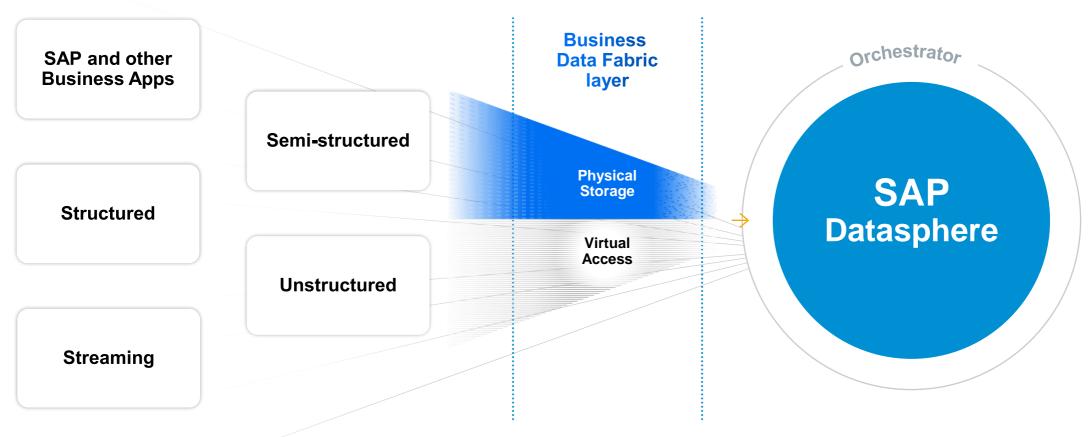
SAP HANA

Cloud & on-Premise

SAP HANA Data Lake Files

Enrich all data projects

Virtually access or physically store data from anywhere



Choose between SAP Datasphere data federation or data replication capabilities to combine sources and harmonize heterogeneous and real-time data

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INTERNAL – SAP Only

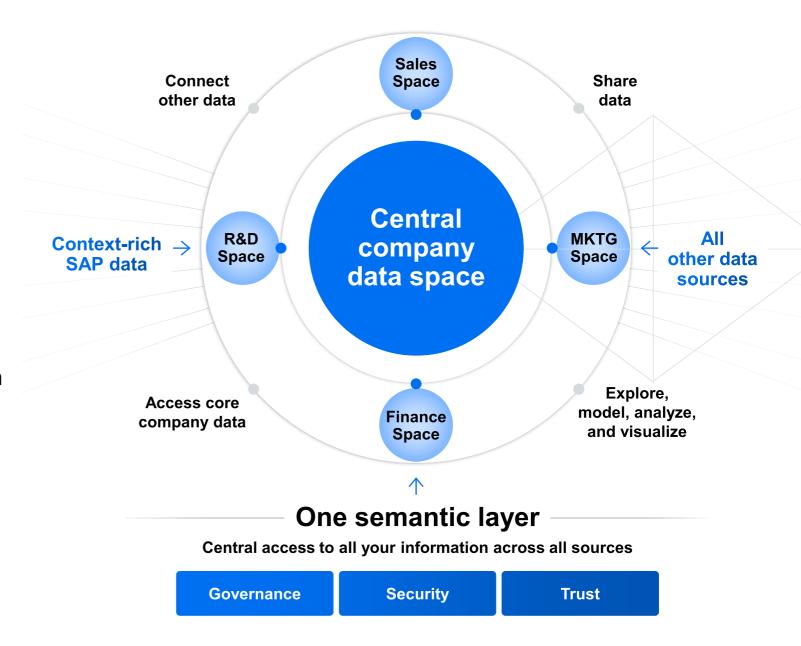
Simplify the data landscape

Enable self-service data access

Provide user-friendly access to data products that organize and manage data for different lines of business with SAP Datasphere Spaces

Implement powerful data preparation with complex transformations

Access data via SAP and non-SAP tools and open interfaces



Data Marketplace

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

SAP DATASPHERE
MODEL

CONNECT

TO SAP

MODEL **Public** Data Providers 120+ Data Providers **External Data Marketplace** 3000+ Data Products Commercial **Data Providers MKTG SALES SPACE** SPACE **Internal Data** Marketplace **Private Data Exchange** R&D FIN **SPACE** SPACE ATASPHER Suppliers Customers Any Business IT GOVERNANCE • SECURITY • TRUST Partner 성 Catena-X BW Open **Native** Bridge Connectors Interfaces SAP data 3rd party application data Public

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

Public Data Marketplace

Discover & connect external data products for instant usage in your space for harmonization with other (internal) data artifacts.

Internal* Data Marketplace

Productize internal data assets for more scalable self-service and more effective adoption.

Private Data Exchange

Exchange data with suppliers, customers and other business partners in private environment within or between tenants.

* According to the Roadmap

BW Bridge Capitalizes on Your Existing Assets & Skills

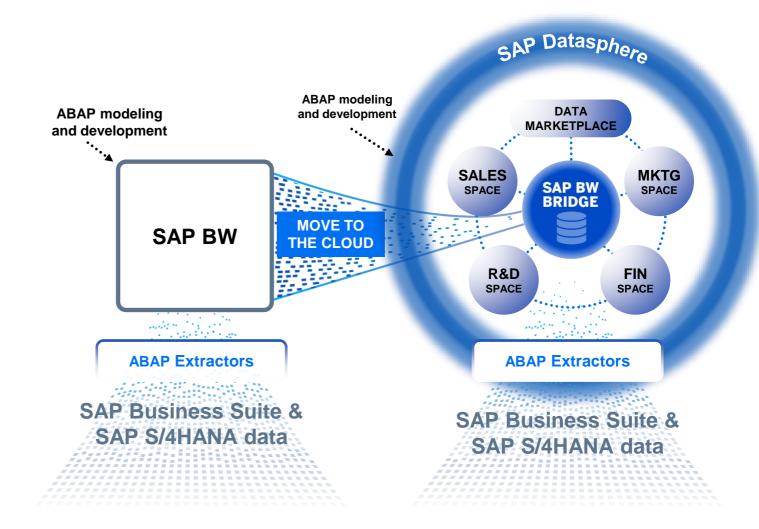
Reuse existing SAP BW investments for shorter time-to-value

Single query import

- Import single entities such as BW queries, info providers, or info objects from a BW bridge
- Model semantics in BW objects and reuse it in SAP Datasphere

Import wizard – semantic information reuse of bridge models

- Reusability of existing metadata and reduce modelling efforts
- Empower SAP Datasphere users to reuse existing semantics



Modeling for Everybody







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, 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



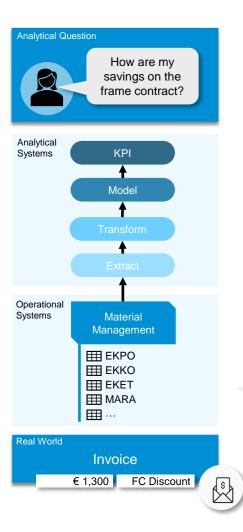
- SAP HANA Cloud Modeling capabilities leveraging Calculation View, Flowgraph, Synonym, etc.
- Simply re-use HANA based Modeling within SAP Datasphere

Combining SAP Datasphere & SAP Analytics Cloud*

SAP Datasphere SAP Analytics Cloud Data sources Ad hoc data **Exploration** Data layer **Business layer** Powerful **Visualization** Intelligent Augmentation 000 00 00 **Business Planning**

^{*} Please note that both SAP Analytics Cloud and SAP Datasphere are separate products and can be used independent from each other.

Business Content Overview

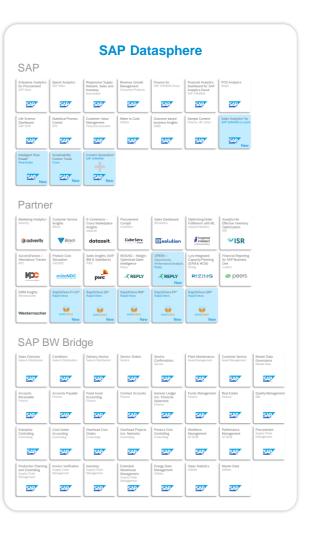


Business Content Collection

Leverage SAP's business expertise and knowledge from our ecosystem of partners with pre-built data models, semantic views of SAP application data, and transformation logic.

Continuously growing number of content packages

- 250+ Content packages built by SAP & Partners for SAP Analytics Cloud and SAP Datasphere
- 31 Content Packages with SAP BW Bridge (11,000+ reusable objects)
- SAP S/4HANA Content Generation (1,000+ Fiori apps ready for import)



Overview of 2023 Priorities

Key priorities will add crucial capabilities and provide further integrated offering

SAP BW Bridge

Increased coverage

- Increase coverage of SAP BW, SAP BW/4HANA capabilities.
- Support Non-Cumulative Key figures, External Hierarchies, Exit Variables, etc.

Data Integration

Increased data reach

- Advanced data transformation
- Coverage of additional DI use-cases and operators
- Additional data sources and targets for Replication Flows

SAP Analytics Cloud

Seamless integration

- Further extension towards a seamless planning experience with SAP Analytics Cloud
- · Deepened model integration
- · Data Analyzer

Elasticity Concept

React to usage

- On demand compute during peak consumption scenarios
- Improved baseline sizing and TCO optimization

Space Dependent Permissions

More flexibility

- Granular assignment of permissions per space
- Grouping of users and spaces
- Automatic assignment based on SAML attributes and SCIM API

Discover and Share

Collaborate on data

- · Catalog and Data Crawling
- Data product exchange within and between organizations

Modeling

Expanded capabilities

- Multi-Fact modeling and stacking support on the Analytic Model
- New modeling features (e.g., folder support, external hierarchies, fiscal year)

Life-Cycle Management

No disruption

- Delivery package management
- Content protection based on namespace
- Content management CI/CD

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Worldwide customers













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A vibrant ecosystem



Why SAP Datasphere



Complete End-to-end Solution

Unified data and analytics service providing a complete end-to-end solution with one semantic view designed for business and IT.



Re-use & Extend SAP BW Investments

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



Connect to SAP Data with Business Context

Out-of-the box understanding of SAP data with semantic business context from SAP applications.



Choice and Openness

Multi-cloud support and open interfaces with choice of modeling environments, analysis tools & languages (SQL, Python, Jupyter notebook etc.) – from business analysts to data scientists to developers.



Connect and Collect Data from all Sources

Data virtualization, replication and orchestration from SAP and third-party solutions across clouds and with on-prem.



Business Content

Pre-built data models, semantic views of SAP ERP data (CDS views & Service APIs), and transformation leveraging SAP's business expertise and ecosystem partners' knowledge.



Semantic Business Modelling

User empowerment with self-service modeling, governance and IT control. User ability to connect own data, share it securely, and run analytics without affecting other users.



Integrated Data Marketplace

Data Marketplace manages scalable and decentralized cross tenant data exchange for data providers & consumers. Use Intelligent Lookup to match imperfect data sets for enterprise-ready usage.



Spaces Management & Data Sharing

Independent virtual work environments to foster collaboration and enable data sharing between IT, business units, and projects to connect global and local data.



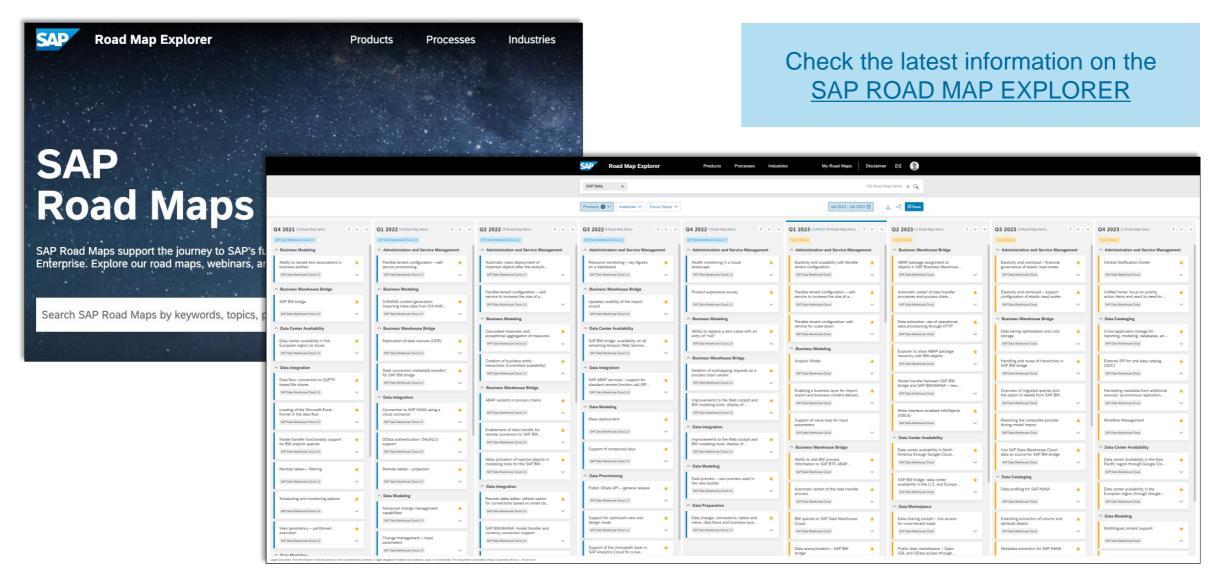
Future Platform for Planning*

Streamlining planning and analysis with reduced modelling efforts, while operating on a single source of truth for analytics and planning across the organization.

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* More information on the Roadmap

SAP Road Map Explorer

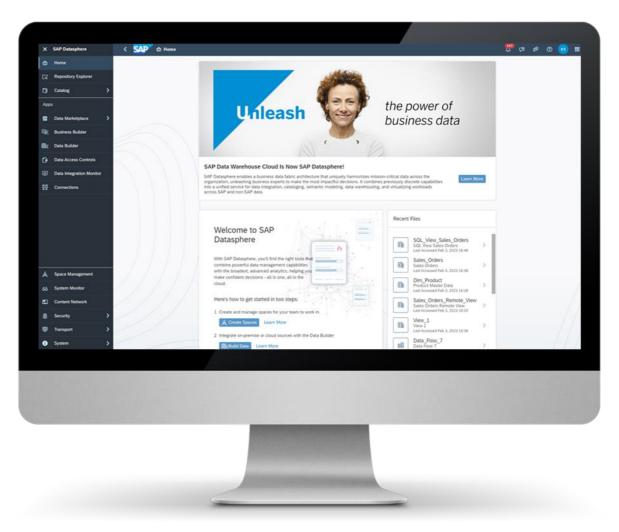


Start your data and analytics journey with SAP Datasphere

Take a tour with the Guided Experience

Learn more on SAP.com

Join the conversation in the SAP Community



Thank you.

Contact information:

Florian Neukirch
Product Specialist
Data Warehouse
SAP HANA Database & Analytics

