SAP Business Unleashed Innovation Day

When you connect everything,
you can achieve anything.

Business Data Fabric - Five Steps to a Business Data Fabric Architecture

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Agenda

- The Value of a Business Data Fabric
- How SAP Business Data Cloud strengthens a Business Data Fabric
- How to Build Your Future on a Business Data Fabric (*the five steps*)

The Value of a Business Data Fabric

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

Applications, AI, and planning require context from quality, trusted data

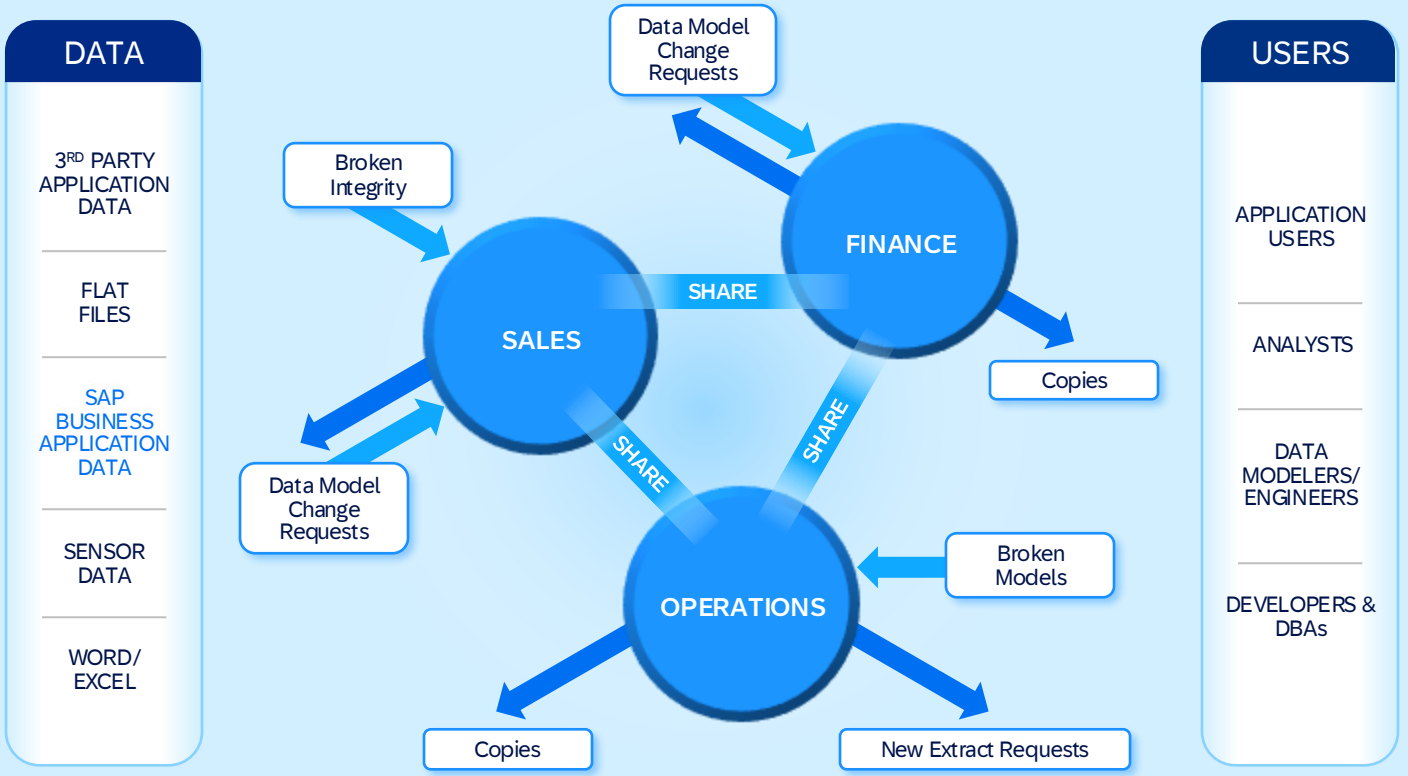
Business context and logic, especially metadata, has been removed from business data

Gen AI can be next revolution in productivity, but it requires context and quality data

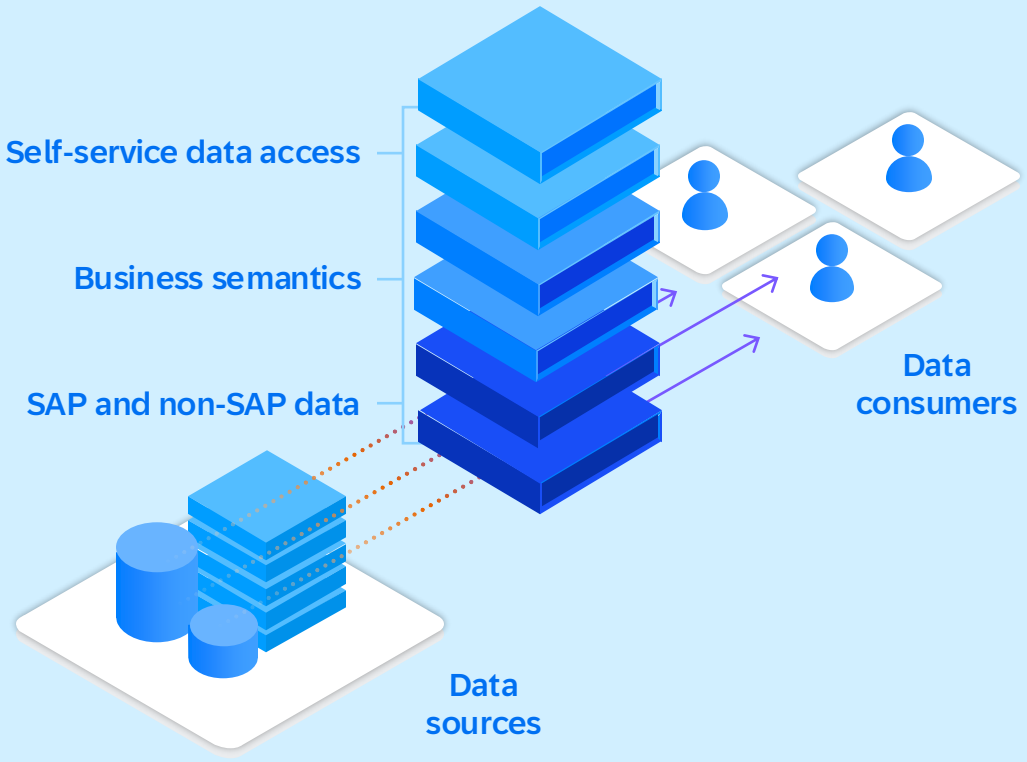
The majority of business users lack data context necessary for data to be useful

Extracting data from your landscape removes its context and meaning

- Requires extensive time and effort to recreate business logic
- Inhibits the ability to deliver business data for business users
- Widens the divide between transactional and analytical data



Deliver business data in business terms with a business data fabric



- Deliver business data in business terms to ensure business users can easily understand and use corporate data
- Preserve the context and semantics of data including business descriptions, metadata, and relationships
- Accelerate self-service culture inside and beyond business functions

SAP Datasphere is the foundation for a business data fabric architecture

Data consumers

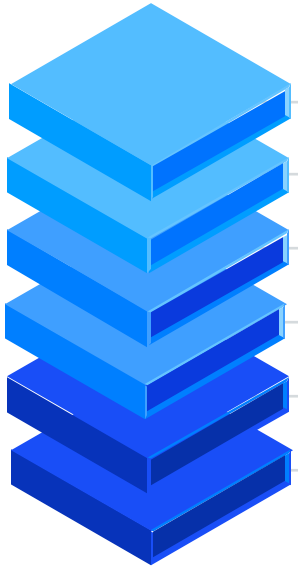
Planning and analytics | **Intelligent data apps** | **Data science**

SAP Datasphere running SAP BTP

Security

Access control

Availability



Self-service data access | Virtual data products

Data discovery | Business content, data marketplace, recommendations

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

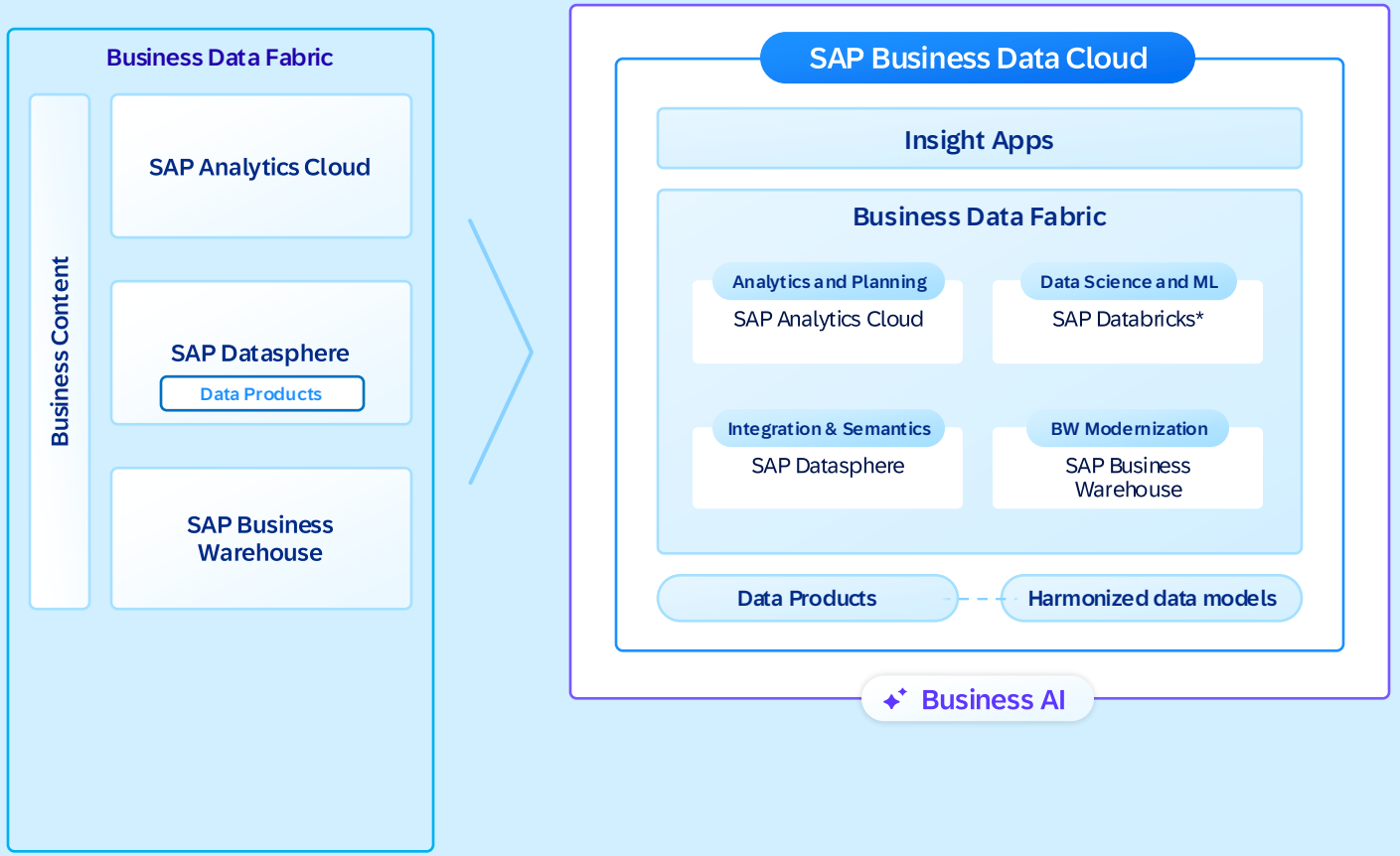
Applications | **On-premises Data Warehouses** | **Cloud Data Warehouses and Lakehouses** | **Relational Databases** | **Unstructured/ Semi-structured Data**

How SAP Business Data Cloud strengthens a Business Data Fabric

Creating additional value to the Business Data Fabric by extending the services

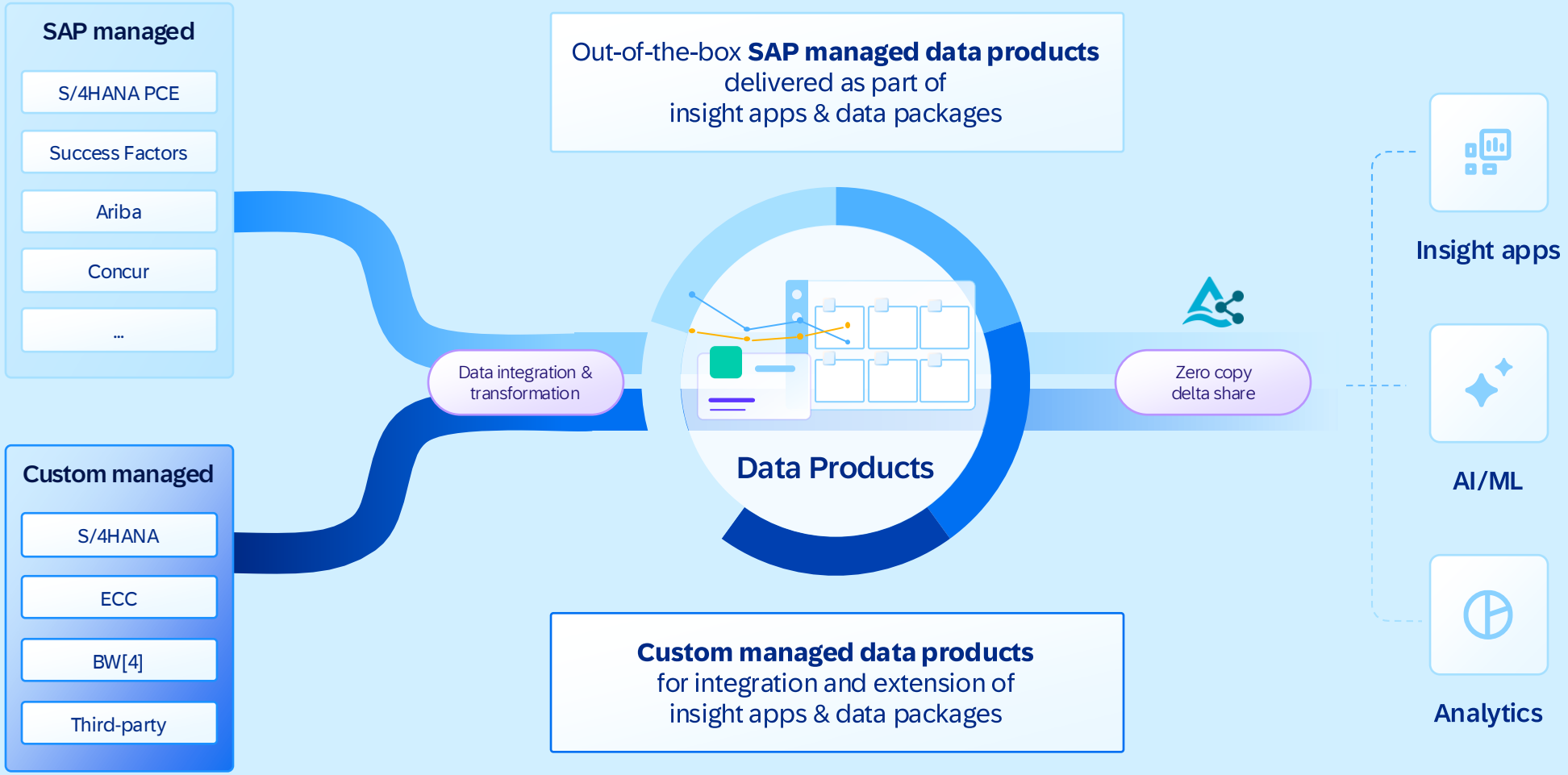
Enhance the use cases to create additional business value

- **Pivotal evolution of the Business Data Fabric**
  leveraging existing solutions and investments with SAP Analytics Cloud (for planning), SAP Datasphere and SAP BW or SAP BW/4HANA and its capabilities
- **SAP data products and insight apps**
  deliver the next-level business content eliminating the need for manual data integration and modeling while accelerating the process from data to insights
- **SAP BW modernization**
  take your SAP BW or BW/4HANA investment along and enable custom data products on your BW data
- **Data science and ML use cases**
  on an integrated platform leveraging SAP Databricks* and object store technology with zero copy delta share
- **Infuse AI with Joule**
  unifying data platforms and business applications to establish the foundation for SAP Business AI



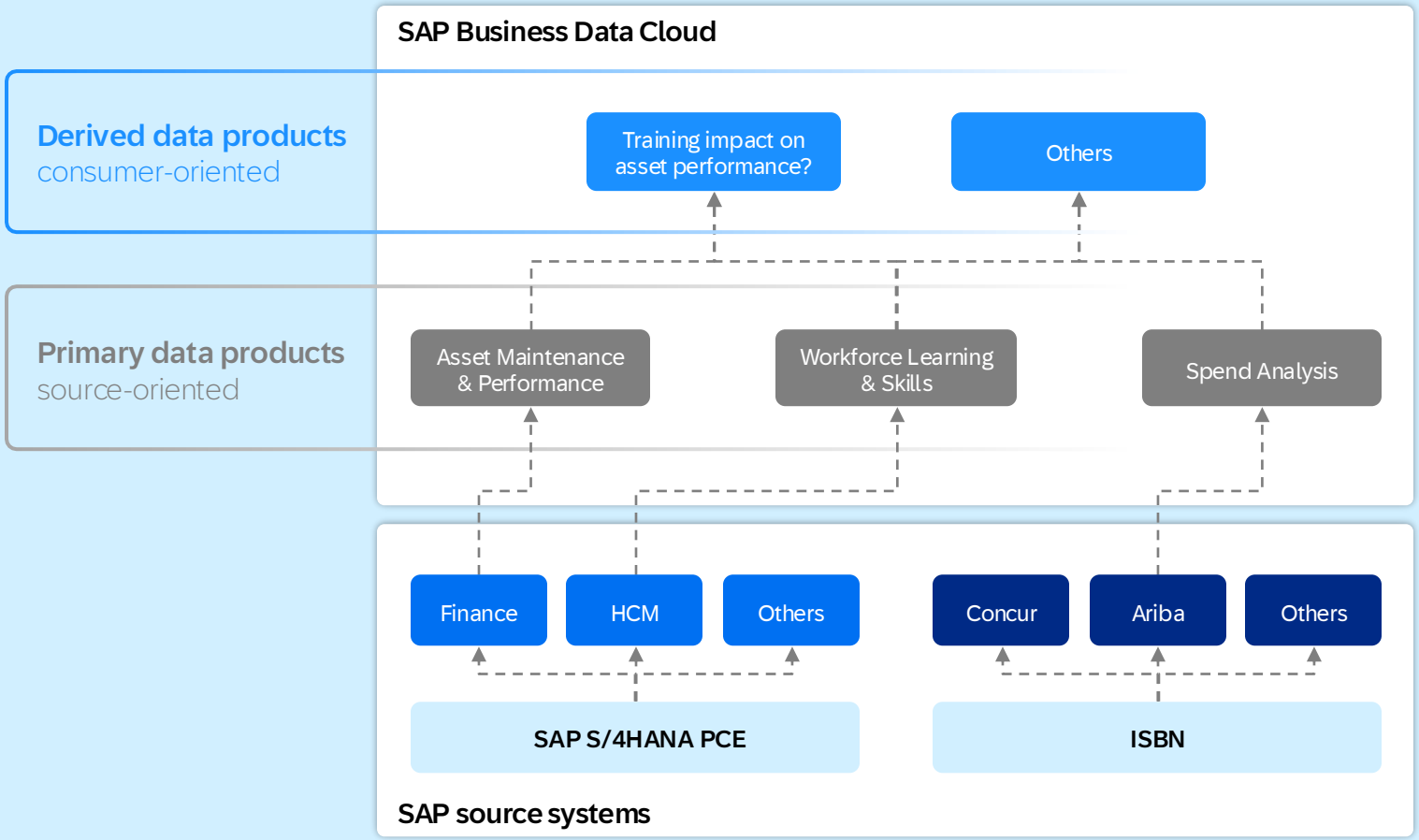
*SAP Databricks will be part of GA version

Establish a Data Product Economy to serve multiple use cases



Organize SAP data through data products

A service to minimize time to insight

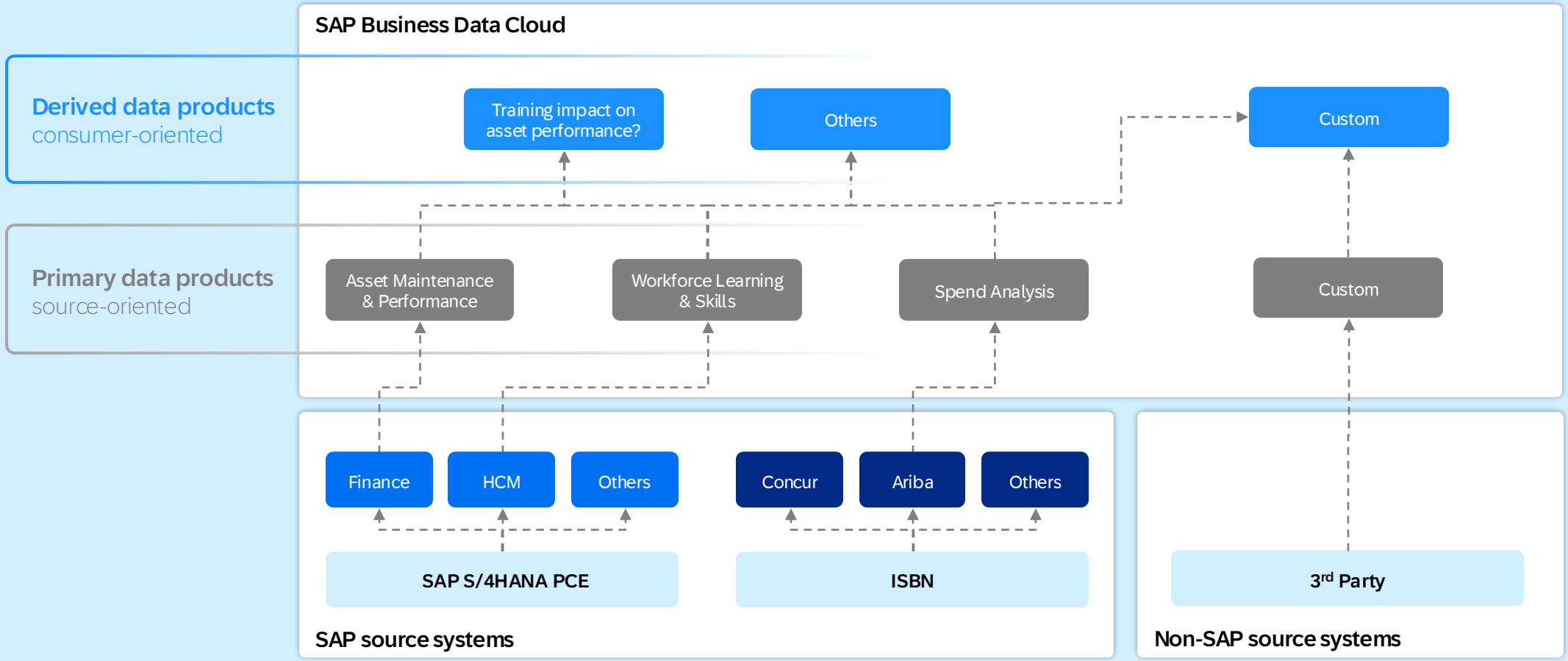


Primary and derived data products

A **derived data product** is curated by SAP and derived from other data set(s). They deliver value-add and are based on other data products or APIs.

A **primary data product** is directly provided from applications and is not based on other data products representing the original data from a source application.

Extending the Business Data Fabric with non-SAP data



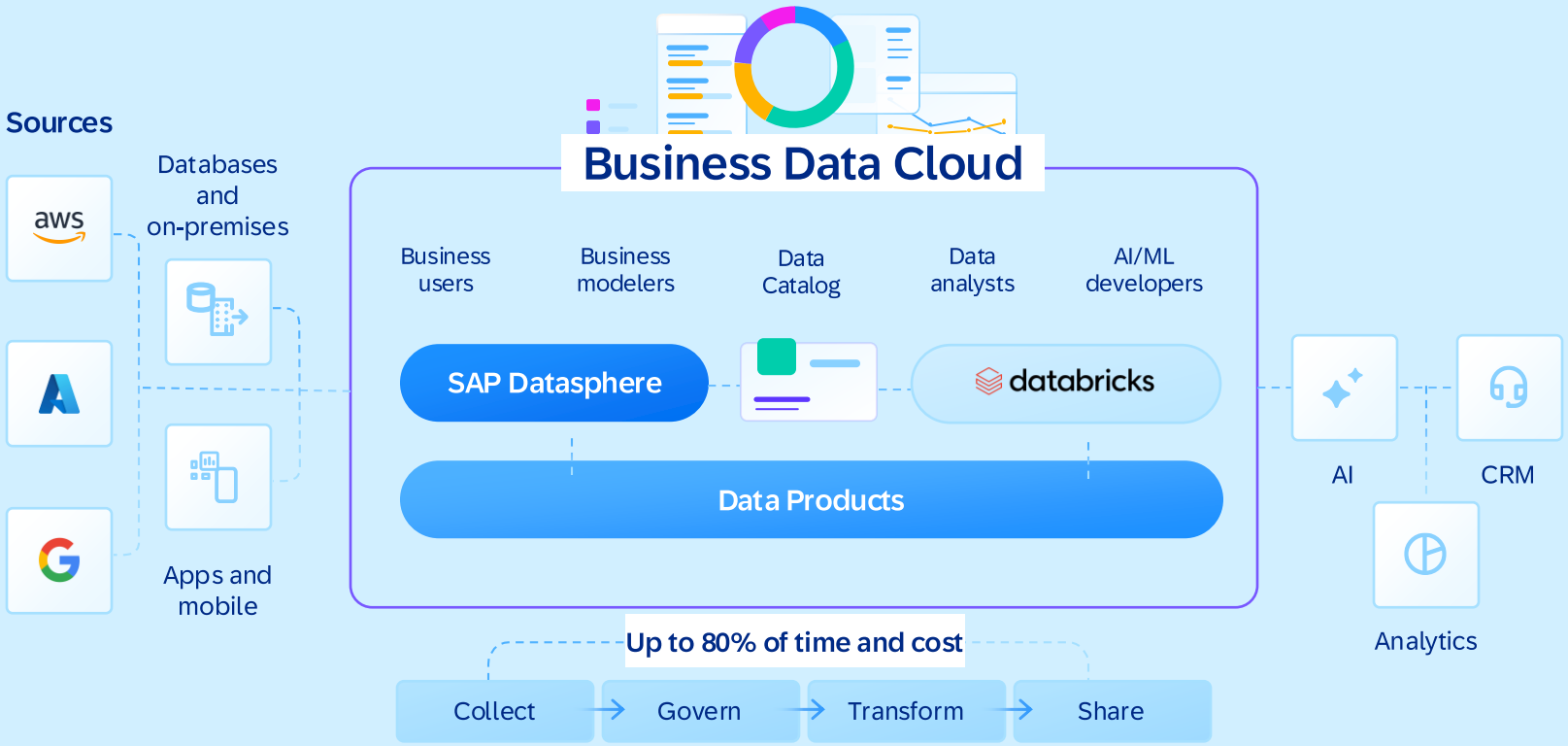
Unlock the full potential of your data with SAP Databricks

Recognized as a market leader in unified data and AI platforms

Fully managed and embedded within SAP Business Data Cloud

Brings industry leading data engineering, data science, advanced analytics and SQL serverless capabilities to SAP's Business Data Fabric

Optimized to work with SAP data products with zero-copy data exchange



Capabilities gained using SAP Databricks

SAP Databricks

Unify data with zero copies

Leverage delta sharing to connect and blend data without the need for or complex ETL or data copies

Delta Share

Deliver trusted data products

Access curated SAP managed data products

Build derived data products and publish to catalog

Unity Catalog

Develop with pro-code tooling

Develop pro-code data engineering & custom AI/ML.

Write spark pipelines to blend SAP and 3rd party data

Databricks Notebook

Analyze data at scale, on-demand

Analyze data at scale on-demand with SQL, for faster, data-driven decision-making

Databricks SQL

Build custom AI and ML

Build governed and secure custom AI/ML solutions, leveraging trusted, reliable, AI-ready data

Data Science & Mosaic AI

Simplify and fully integrate your data landscape

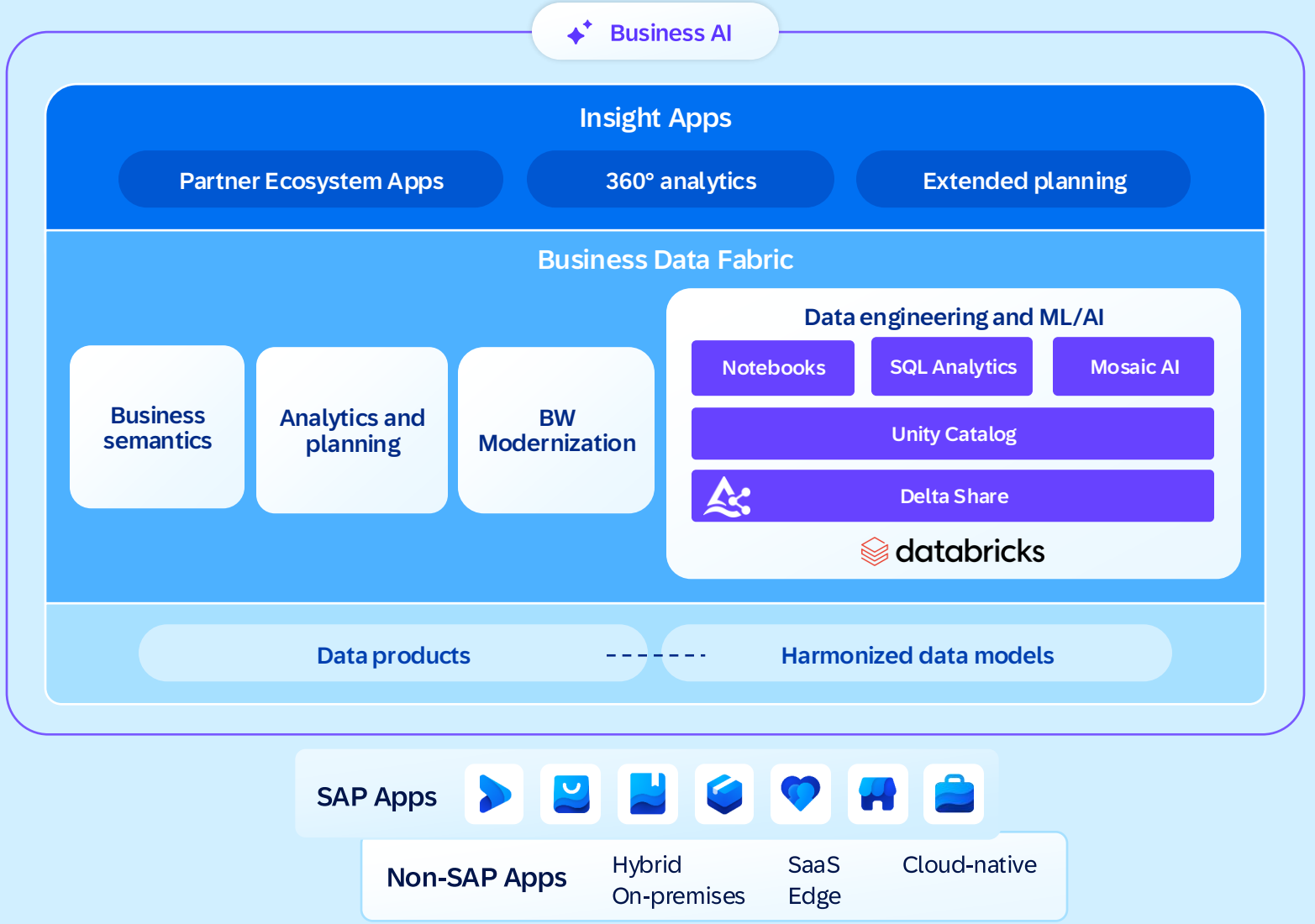
Unify data with zero copies leveraging Delta Share

SAP Databricks enables secure and seamless data sharing between SAP and non-SAP data

Point and click interface to enable zero copy sharing between data scientists and data engineers, eliminating the need for complex and time-consuming ETL processes

Seamlessly integrate SAP and external data of all types, creating a unified ecosystem for smarter, more informed decision-making

Leverage built-in authentication within the Delta Share protocol to securely create data shares directly from SAP Business Data Cloud



How to Build Your Future on a Business Data Fabric

SAP Business Data Cloud components overview

SAP Business Data Cloud

Insight Apps

SAP Analytics Cloud
BI, Joule, Planning

SAP BDC Cockpit
- Entitlement Management
- Data Product Installation
- Security and Governance

SAP BW PCE
- Corporate Data Assets
- Legacy Data Flows
- Data product generator

SAP Datasphere
- Semantics
- Joule
- Knowledge Graph

Partner Connect

SAP Databricks*
- Zero Copy
- Bi-directional sharing
- Custom AI / ML

Object Store
Standardizing data ingests for SAP LoBs

SAP Data Products
(based on canonical data model)

Custom Data Products
(based on S/4HANA Z-CDS-Views, Customer managed Source Systems, SAP BW, Partners or Databricks)

Open data ecosystem

databricks

CONFLUENT

Collibra

DataRobot

Google Cloud

SAP LoB Source Systems
SAP Managed

S/4HANA PCE | ISBN | HCM | CX | Sustainability

SAP LoB Source Systems
Customer Managed

S/4HANA On-Prem | BW | ECC

Non-SAP Source systems

Files | API | AWS, Azure, etc.

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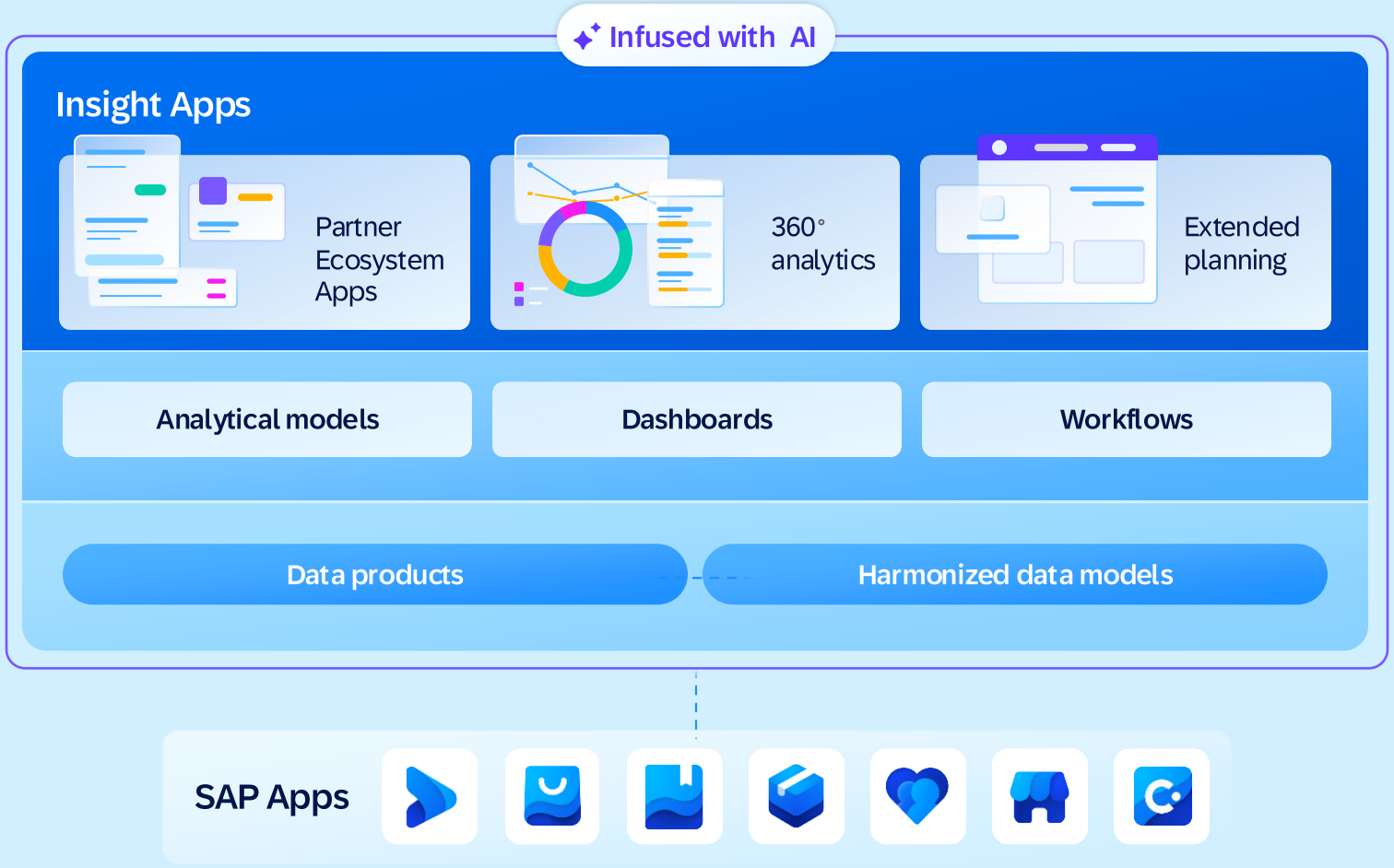
Insight Apps

Managed by SAP



Flip a Switch for Analytics

Managed by SAP

- Data Extraction from SAP Applications
- Harmonized Data Model
- BI Dashboards and Planning Apps
- Infused with AI

5 Step Framework towards a Business Data Fabric

1. Data ingestion: The first step in building a business data fabric is to ensure that all your data, whether it's structured or unstructured, can be easily ingested into the system. A business data fabric, with its open data ecosystem, allows for more seamless data ingestion, regardless of the source or the format of the data.

2. Data integration: Data from various sources must be integrated and transformed into a unified format easily consumed by data users. The interoperability of a business data fabric enables data from different sources to be combined and connected rather than simply moved around.

3. Data governance: With the increasing complexity and volume of data, governance becomes paramount. This includes ensuring data quality, privacy, and compliance with various regulations. A business data fabric helps ensure effective governance by maintaining metadata, lineage, and control measures.

5 Step Framework towards a Business Data Fabric

4. Data cataloging: This involves creating an inventory of data assets and their metadata. The catalog serves as a single source of truth for users to find, understand, and trust the data they need. It's a critical component of the business data fabric that allows data consumers to understand the business semantics.

5. Data consumption: Finally, it's about delivering the right data in the right format, at the right time, and to the right people. The business data fabric supports data federation, which enables unified and consistent access to data across diverse sources, reducing data redundancy. It better ensures data is presented in business-friendly terms and contexts, making it simpler for data consumers to interpret and use the data for their specific use cases.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Thank you




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