Move to SAP BTP with SAP HANA Cloud
Creating an Intelligent Enterprise with a Single Source of Truth

SAP

3rd November 2021

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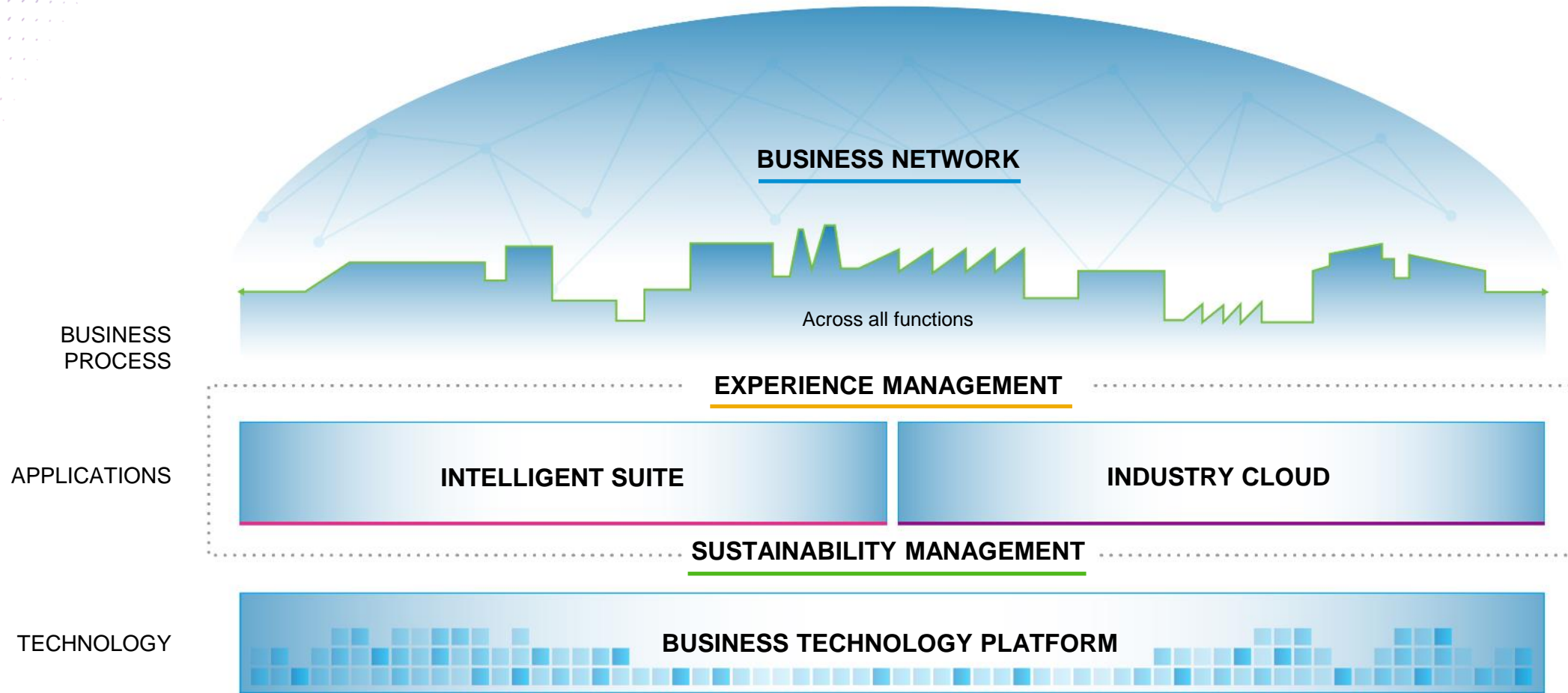
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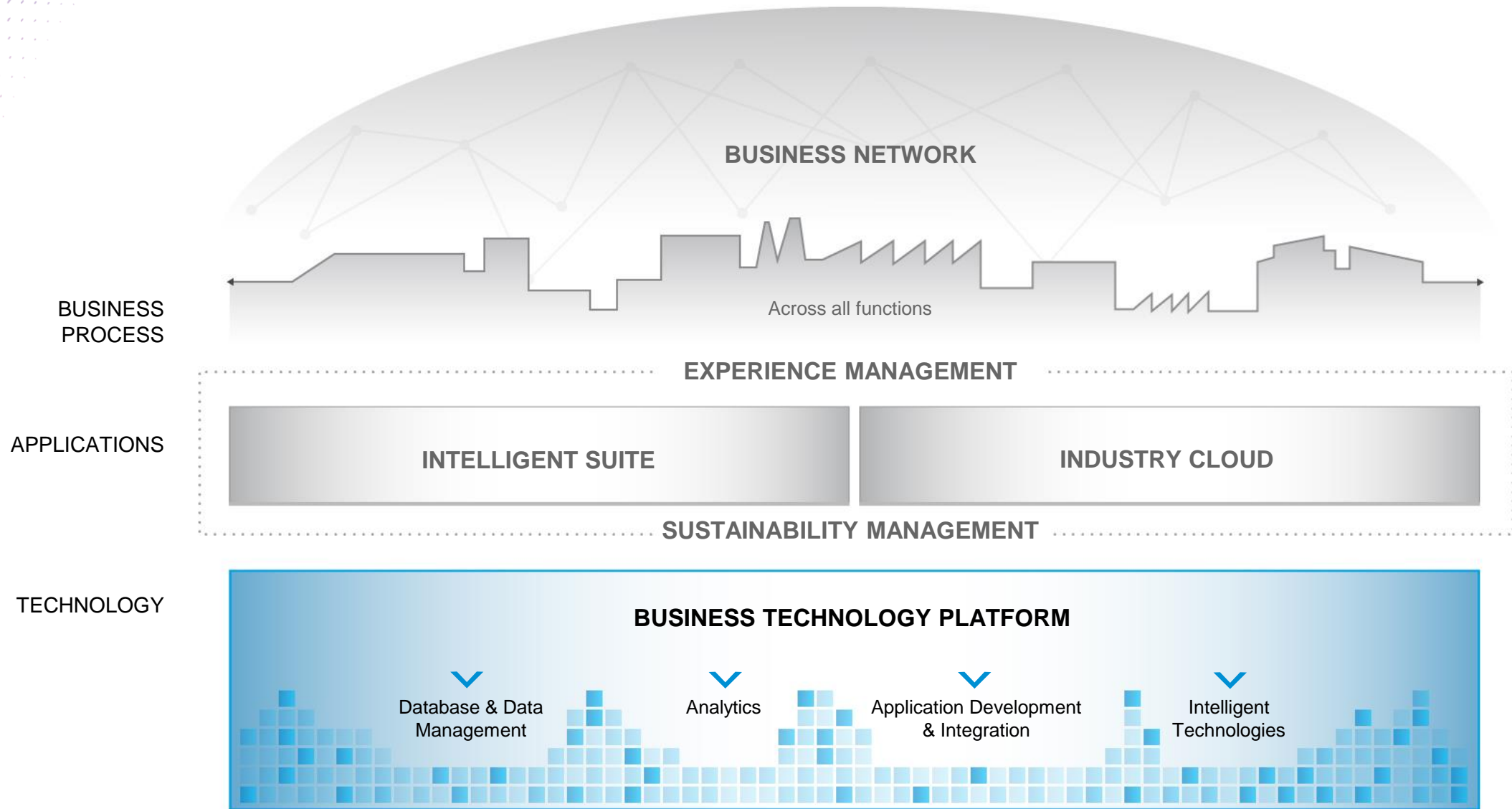
SAP Business Technology Platform

SAP's Business Technology Platform
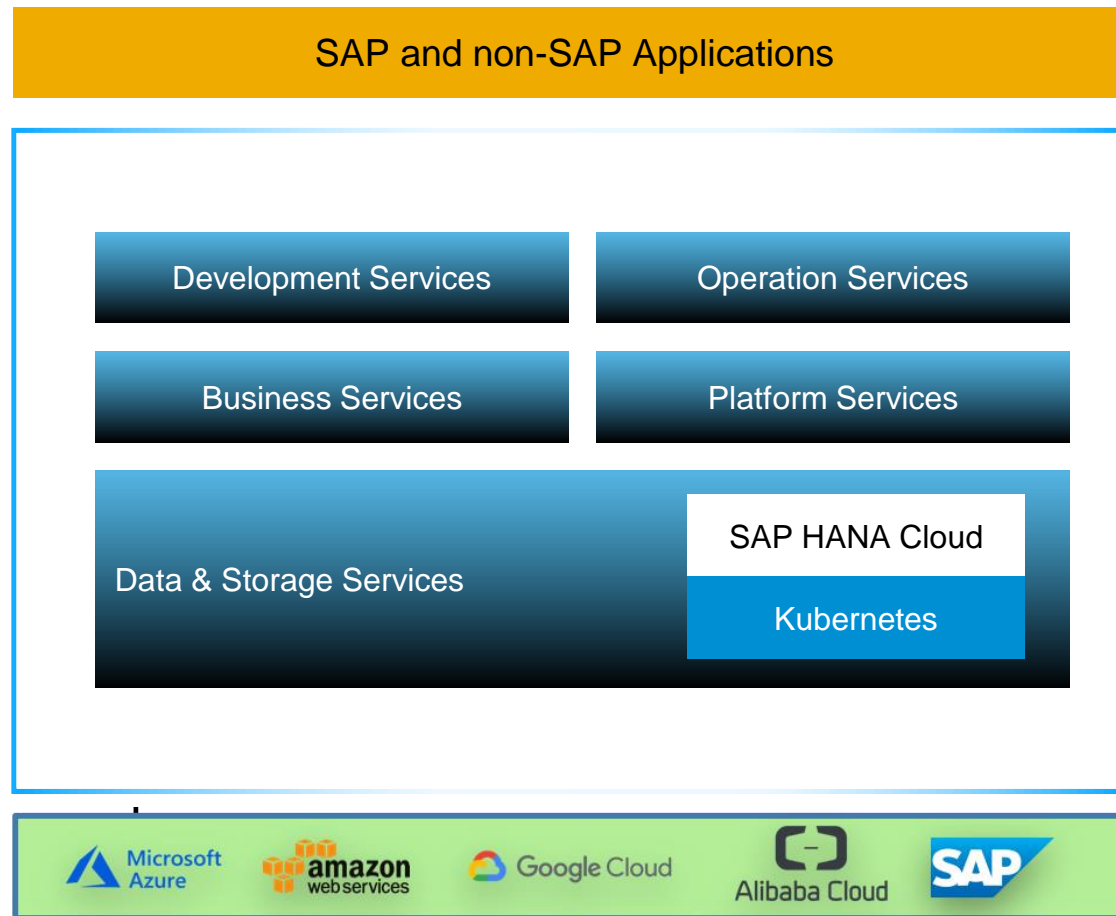## as Foundation for the Intelligent Enterprise

BUSINESS NETWORK

Across all functions

BUSINESS PROCESS

EXPERIENCE MANAGEMENT

APPLICATIONS

INTELLIGENT SUITE

INDUSTRY CLOUD

SUSTAINABILITY MANAGEMENT

TECHNOLOGY

BUSINESS TECHNOLOGY PLATFORM

SAP's Business Technology Platform

as Foundation for the Intelligent Enterprise

BUSINESS NETWORK

BUSINESS PROCESS

Across all functions

EXPERIENCE MANAGEMENT

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INTELLIGENT SUITE

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SUSTAINABILITY MANAGEMENT

TECHNOLOGY

BUSINESS TECHNOLOGY PLATFORM

Database & Data Management

Analytics

Application Development & Integration

Intelligent Technologies

SAP HANA Cloud | Integrated with SAP Business Technology Platform

| SAP and non-SAP Applications | **Cloud or On-Premises** |

| Development Services | Operation Services |

| Business Services | Platform Services |

Data & Storage Services

SAP HANA Cloud

Kubernetes

Operated by SAP

Microsoft Azure amazon web services Google Cloud Alibaba Cloud SAP

Multi-Cloud

SAP HANA Cloud Architecture
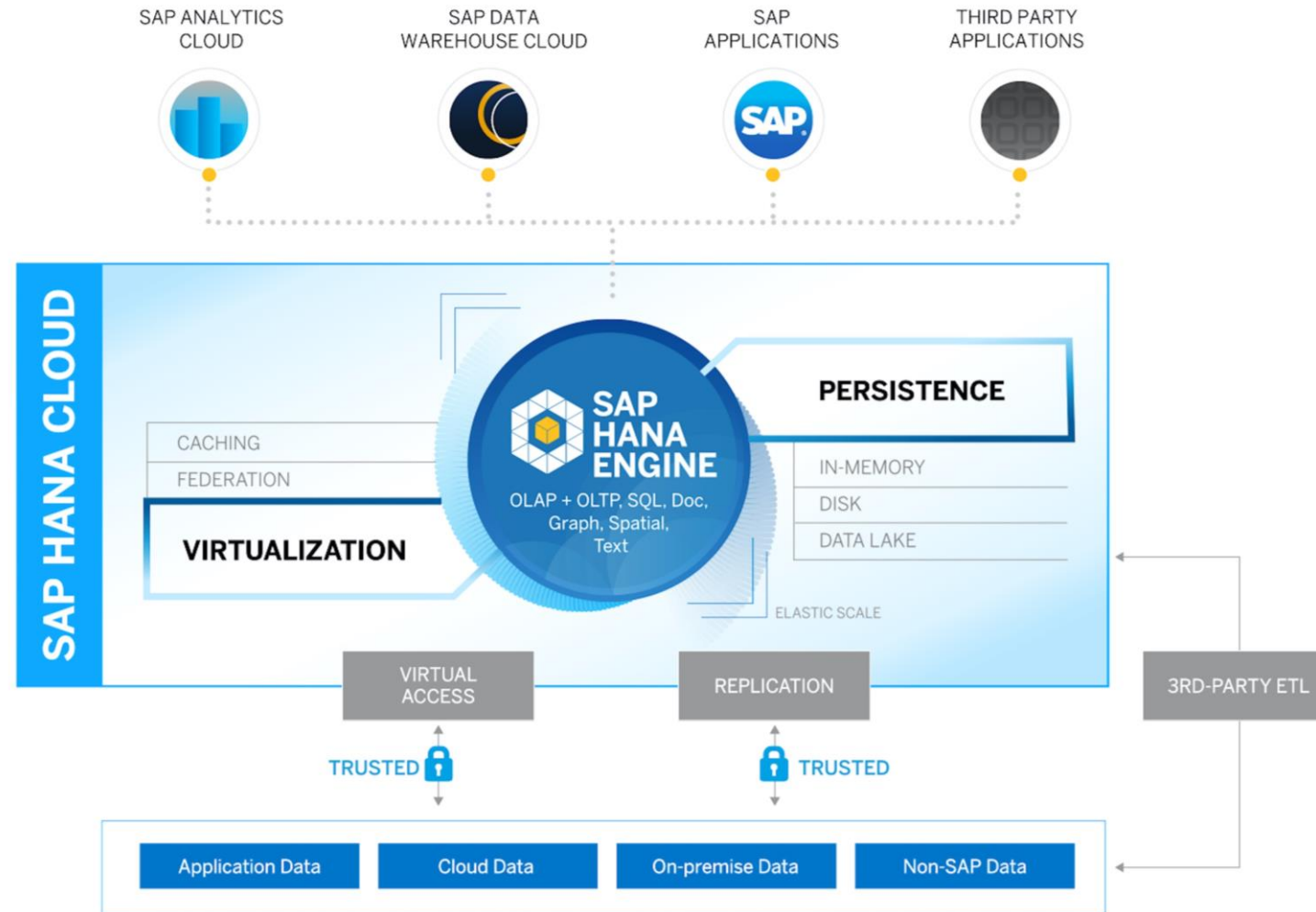
SAP HANA Cloud | Our Value Proposition
Managed Cloud Multi-Tier Database

MULTI-SERVICE DB

Combining the known HANA qualities like in-memory, multi-model, hybrid transaction, and analytics processing in real-time with high volume, analytically and transactionally focused services

DATA ON DEMAND

All data, regardless of size, category, and complexity, available to you whenever you need it

EASY INTEGRATION

A unified access layer to simplify data processing while consolidating and harmonizing data integration to your intelligent applications

SAP HANA CLOUD

POWER OF THE CLOUD

Cloud qualities like low TCO, elasticity, serverless principles, high availability, resilience, and autonomous behavior
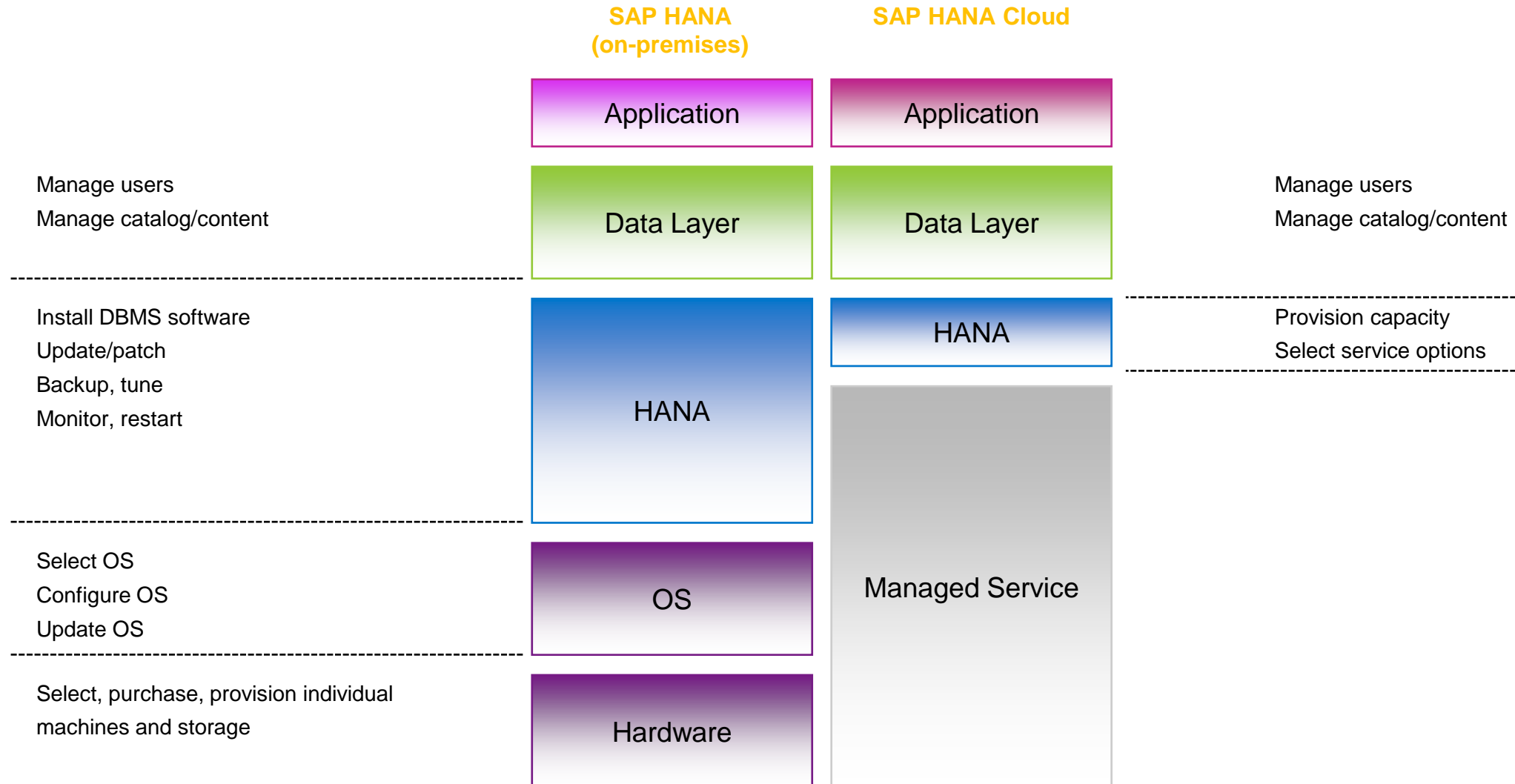
STREAMLINED ACCESS

Simplified data-access which connects all your information without demanding that all data be loaded into a single storage solution

DEVELOPER EXPERIENCE

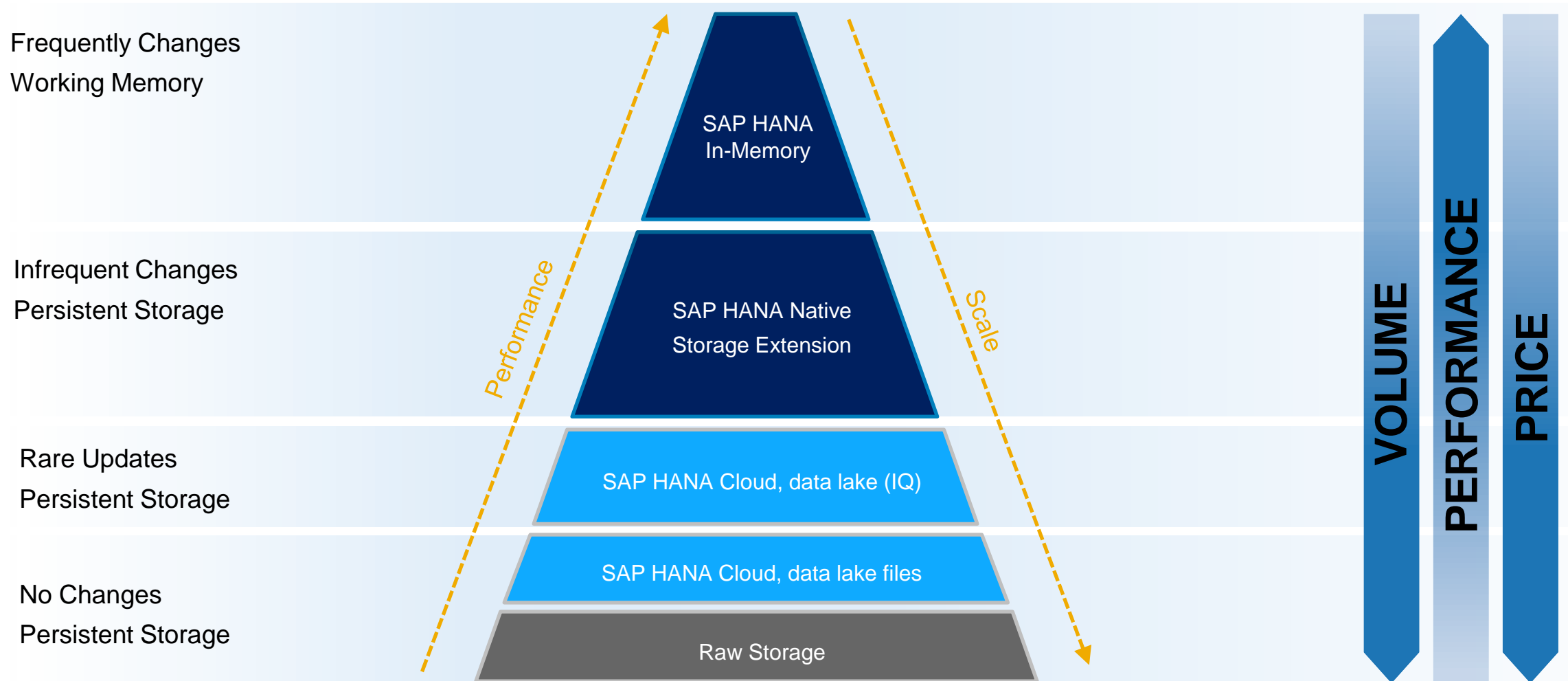A development environment to develop and model custom applications

SAP HANA Cloud | SAP HANA vs. SAP HANA Cloud

Benefits of a Managed Cloud Database Solution

	SAP HANA (on-premises)	SAP HANA Cloud	
	Application	Application	
Manage users Manage catalog/content	Data Layer	Data Layer	Manage users Manage catalog/content
Install DBMS software Update/patch Backup, tune Monitor, restart	HANA	HANA	Provision capacity Select service options
Select OS Configure OS Update OS	OS	Managed Service	
Select, purchase, provision individual machines and storage	Hardware		

SAP HANA Cloud | Data Pyramid

Store Data Beyond the Scale of SAP HANA with Low Cost

Frequently Changes
Working Memory

**SAP HANA
In-Memory**

Infrequent Changes
Persistent Storage

**SAP HANA Native
Storage Extension**

Rare Updates
Persistent Storage

SAP HANA Cloud, data lake (IQ)

No Changes
Persistent Storage

SAP HANA Cloud, data lake files

Raw Storage

Performance

Scale

VOLUME

PERFORMANCE

PRICE

Bimodal IT

Keep mission critical systems on-prem while having the competitive edge utilizing the most up to date technologies in SAP HANA Cloud

Business Integrity

Keeping the critical data on-premise and only replicating minimal needed data to cloud assures business integrity

Elasticity

Easily extend the computational resources into SAP HANA Cloud whenever needed

Agile decision making based on trusted live data

Conduct live business analysis in the cloud based on real-time replication or query federation

Combine Big Data scenarios

Easily combine various data collections from different IoT devices and events generated in the Internet with internal corporate data for competitive business insights

SAP HANA Cloud

DATA DELIVERY
(Interfaces)

TRANSFORMATION   MODELING

CACHE   ◄---   **FABRIC VIRTUAL TABLE**   ---►   REPLICA

VIRTUAL ACCESS

TRUSTED 🔒

SAP Cloud Sources   External Cloud Sources   On-premise Sources
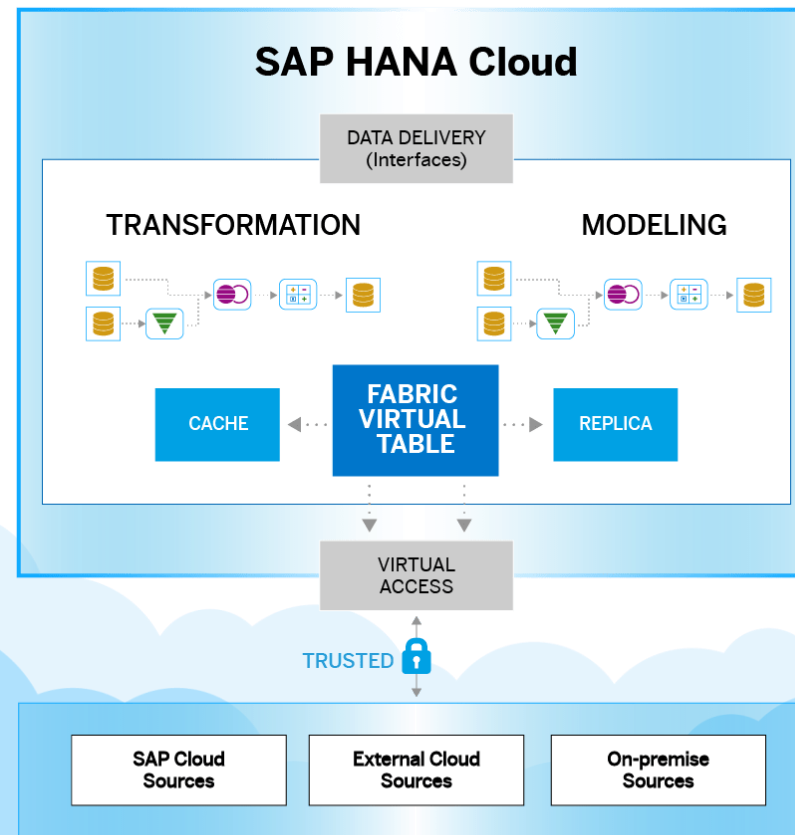
Customer Successes

CUSTOMER STORIES

mondodelvino®

Mondodelvino owns and operates state-of-the-art wineries throughout Italy. Their award-winning wines are enjoyed worldwide in more than 50 different countries. Known for the innovation of their wines, Mondodelvino wanted to extend this innovation to their data. That's why they deployed SAP HANA Cloud, a cloud-native database as a service, as the center of their new hybrid data landscape.

POWERING SAP BTP

SAP HANA Cloud

Paolo Caffa, SAP PJM at Mondodelvino

> " For modernizing our data landscape, SAP HANA Cloud was exactly what we needed. The self-service capabilities, the powerful connections, and the scalability all help us build a cloud-first strategy on our own terms.

PAIN POINT

- **Lacked flexibility** and a **centralized store** with their previous on-premise landscape

- IT resources were being **diverted from strategic tasks** to focus on more routine tasks, such as maintenance

- **Limited** planning capabilities in their data landscape and made it **difficult to make timely decisions**

SOLUTION

- SAP HANA Cloud provided **one central access layer** that united on-premise, cloud, SAP, and non-SAP data

- SAP HANA Cloud **saved time and money** and allowed IT to focus on innovation rather than routine tasks

- The **multi-model engines** handle all of Mondodelvino's disparate data sources and works in **real time** adding agility and speed

For more details **check out the blog** on Mondodelvino and SAP HANA Cloud

CUSTOMER STORIES

GEBERIT

Geberit founded in 1874 in Switzerland, has grown enormously since its earliest days. To handle rapidly changing technology and a growing amount, they used SAP's Unified Data and Analytics. SAP HANA Cloud is the center of their new hybrid data strategy working alongside SAP Analytics Cloud.

29
Production facilities

CHF 3.1
Billion in manufacturing and supply sales

12,000
Employees in 50+ different countries

POWERING SAP BTP
SAP HANA Cloud
SAP Analytics Cloud

Marius Reck, Head of IT Business Support Applications

> We have business requirements to connect channels like Twitter, like YouTube or our web pages, Google analytics for analytics. With SAP HANA Cloud, it is very straightforward and easy to connect to those applications and get real time analysis
>
> SAP HANA Cloud will be center for all reporting in our data landscape. It's the single source of truth that connects all our data sources and gives us the insights we need.

PAIN POINT

- Having data from SAP and non-SAP sources requiring middleware data solutions to access all data for analysis – Time consuming

- Moving data through all these storage options is **not easy and time-consuming**, also could cause "data sprawl"

- **No single point of access** for this data, making it hard to derive insights

SOLUTION

- SAP HANA Cloud acts as a **central access point of all data**, SAP and non-SAP data sources. CRM data is loaded directly to their Azure SQL database and accessed in real time via SAP HANA Cloud

- Launched SAP Analytics Cloud to replace PowerBI and gain **real-time analytics** with live connection

- Users can **quickly run simulations and create visual reports** through SAP Analytics Cloud without worrying about silos or inconsistent data

For more details **check out the blog** on Geberit and SAP's Unified Data and Analytics

CUSTOMER STORIES

BRENNTAG

As the global leader in chemical distribution, **Brenntag** leverages data whenever possible. With this data, Brenntag can make best possible business decisions and enable partners and customers to interact directly and intelligently with Brenntag's systems.

185,000+
Business customers

640+
Locations in 77 countries

12.8
Billion euros in annual revenues

POWERING SAP BTP
SAP HANA Cloud

Dr. Tobias Carstensen, Director Application Management EMEA

> " SAP HANA Cloud gave us the power to better connect with our customers and suppliers. Thanks to the flexible storage options so we can offer improved interaction capabilities to deliver outstanding services.

PAIN POINT

- No single integration layer for all the different regions and systems made any rollouts a **time-consuming** and labor-intensive process

- A **lack of harmonized data** structures resulted in high efforts for integration and application implementation

- Performance issues **reduced customer satisfaction**

- Operational limitations like monitoring and logging, as well as limited IT resources, made scaling capacity both **difficult and expensive**

SOLUTION

- A **central integration** layer and access point for all data sources including SAP systems and non-SAP systems.

- Data management **capabilities handle a large variety of sources** by being able to replicate or virtualize data

- **Increased agility** with data integration features to easily roll out new features and functionality

- Harmonized data architecture offers **operational simplicity**

For more details **check out the blog** on Brenntag and SAP HANA Cloud

CUSTOMER STORIES

The NHL is the world's top professional hockey league. With SAP's Unified Data and Analytics, coaches gain brand-new insights to inform strategic decision. SAP HANA Cloud houses the enormous amount of data generated from puck and player tracking.

Every 30 milliseconds

Puck and player position coordinates recorded

30 gigabytes

Of archived data per game analyzed instantly

40 terabytes

Of inexpensive long-term storage per season

POWERING SAP BTP

SAP HANA Cloud

Eric Schneider, SVP of IT and Development, NHL

> " Puck and player tracking will be invaluable to our coaches, but it generates an incredible amount of data. SAP HANA Cloud is completely up to the challenge of handling all of this data. Thanks to the powerful tiering capabilities we will save on time, resources, and cost.

PAIN POINT

- Puck and player tracking **generates a vast amount of data** (30 gigabytes per game) that needs to be analyzed in near-real time

- Post-game data needs to be reliably accessed for fast insights

- Long-term data (40 terabytes per season) needs to be **stored inexpensively** to monitor trends

- **Data needs to be visualized** to coaches – and later fans – in a way that's easily understandable

For more details **check out the blog** on the NHL and SAP HANA Cloud

SOLUTION

- High-speed in-memory storage, combined with analytical and transaction processing power, **delivers instant insights**

- Tiering capabilities provide a mix of **high-performance and affordability** based on the importance of data

- Data is successfully tiered down to the cold data level, offering inexpensive storage

- Spatial, graph, and machine learning capabilities, combined with a connection to SAP Analytics Cloud, provide **valuable information and visualizations**

*The NHL has been running SAP HANA since 2015, first on SAP HANA Enterprise Cloud (HEC), then on SAP Cloud Platform, and migrated to SAP HANA Cloud in 2020. Visit *nhl.com/stats* to see it in action.

Extend or Move On-Prem to Cloud

Why hybrid cloud is important?

Flexibility and agility with private or public cloud to meet new and changing business demands while running mission-critical workloads in on-premise data centers
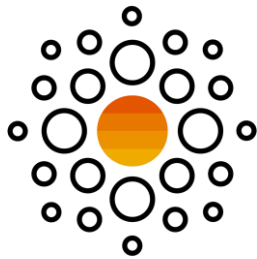
By 2022,
over **90%** of enterprises worldwide will be relying on a mix of on-premises/dedicated private clouds, or multi-cloud

IDC

85% of IT decision-makers agreeing it is a critical part of their hybrid cloud strategy.

Forester Research

The global hybrid cloud - **Market Valued** at 52B (2020) and expected to reach 145B (2026)

Market Research Future

Most enterprises already strategized on hybrid cloud strategy today

Use Case Scenario 1 : Single Access Layer to all Data

Data Sources
Multi-cloud / On-Premises

Custom-Apps

BI Clients

SAP Analytics Cloud

SAP Data
Warehouse Cloud

HANA Cloud

OLAP + OLTP

Fabric
Virtual Tables

Data Virtualization

IoT / Machine Data

Application Data

Databases

Geo Data

Documents

Social Media
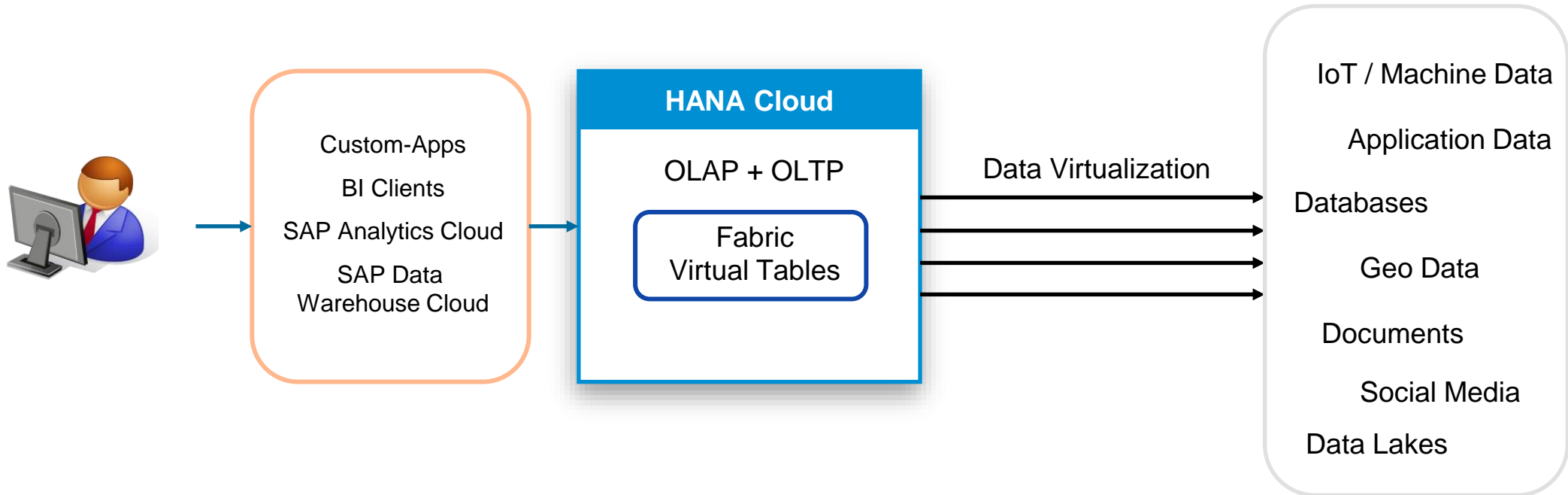
Data Lakes

Quick configuration with low TCO

Unified access of live data

No Data Move, No Replication

Use Case Scenario 2 : Centrally Store and Manage Data

Data Sources
Multi-cloud / On-Premises

Custom-Apps
BI Clients
SAP Analytics Cloud
SAP Data Warehouse Cloud

HANA Cloud

OLAP + OLTP

Relational Data Lake

Data Ingestion

IoT / Machine Data

Application Data

Databases

Geo Data

Documents

Social Media
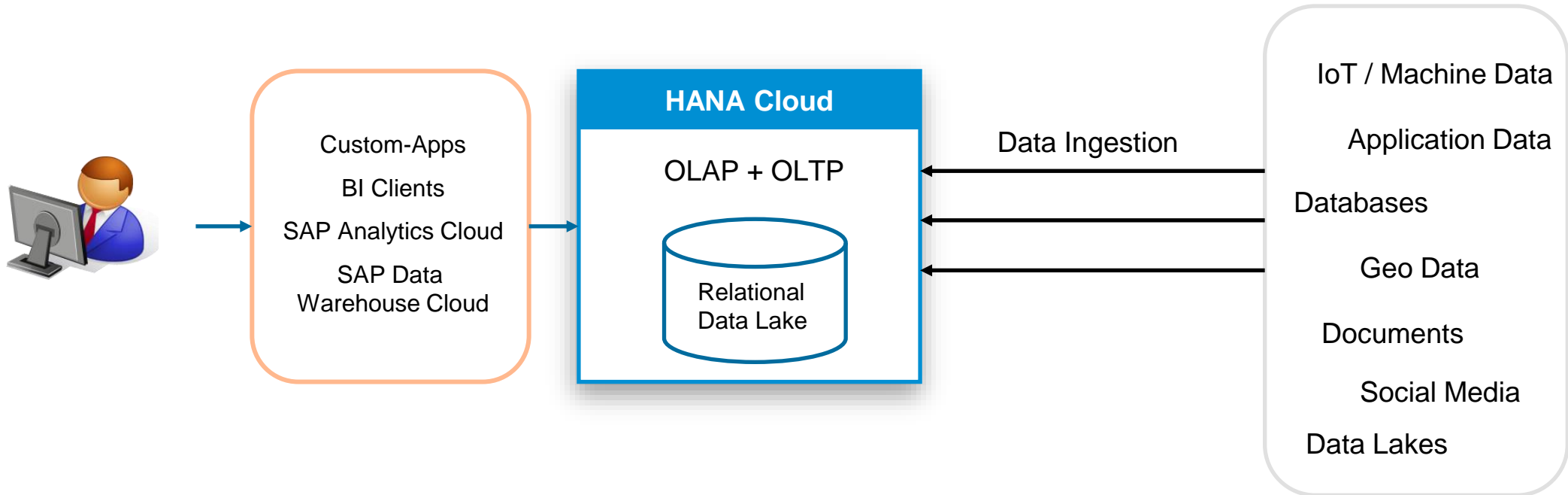
Data Lakes

Built-in Data Lake

Scalable and Centralized

Fast data access with low TCO

Use Case Scenario 3: Expand On-Premises Landscape to the Cloud

Scale to the Cloud

On-Premises Systems

On-Premises Apps

HANA Cloud

OLAP + OLTP, SQL, Doc, Graph, Spatial

Data

Cloud Data

Custom-Apps
BI Clients
SAP Analytics Cloud
SAP Data Warehouse Cloud

Real-Time Replication

Federation

Any DB
Backend Systems

S/4HANA
SAP HANA

Custom-Apps
Reporting
BI Clients

Scale to cloud on Demand

Cover peak analytical workloads

Bi-modal IT
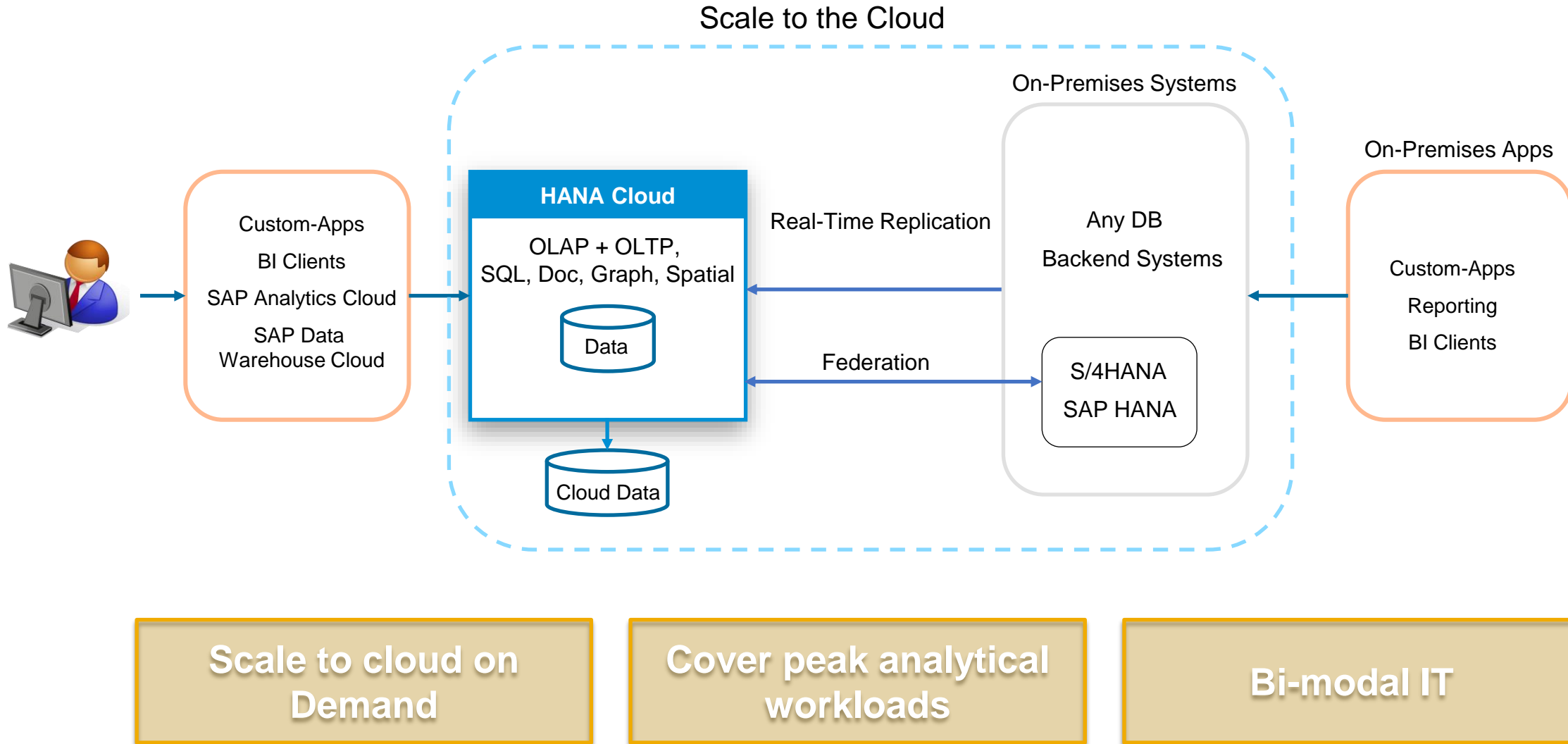
Extending your on-prem workload to SAP HANA Cloud

ON-PREMISES

Users

SAP BI / Fiori / 3rd Party BI

SQL Data Warehousing   SAP BW/4HANA

SAP HANA (Tables)

CLOUD

Cloud based clients

SAP Analytics Cloud / 3rd Party

SQL/Calc Views metadata

SAP HANA Cloud (Tables)

firewall

Copy users & authorization

Copy view definition
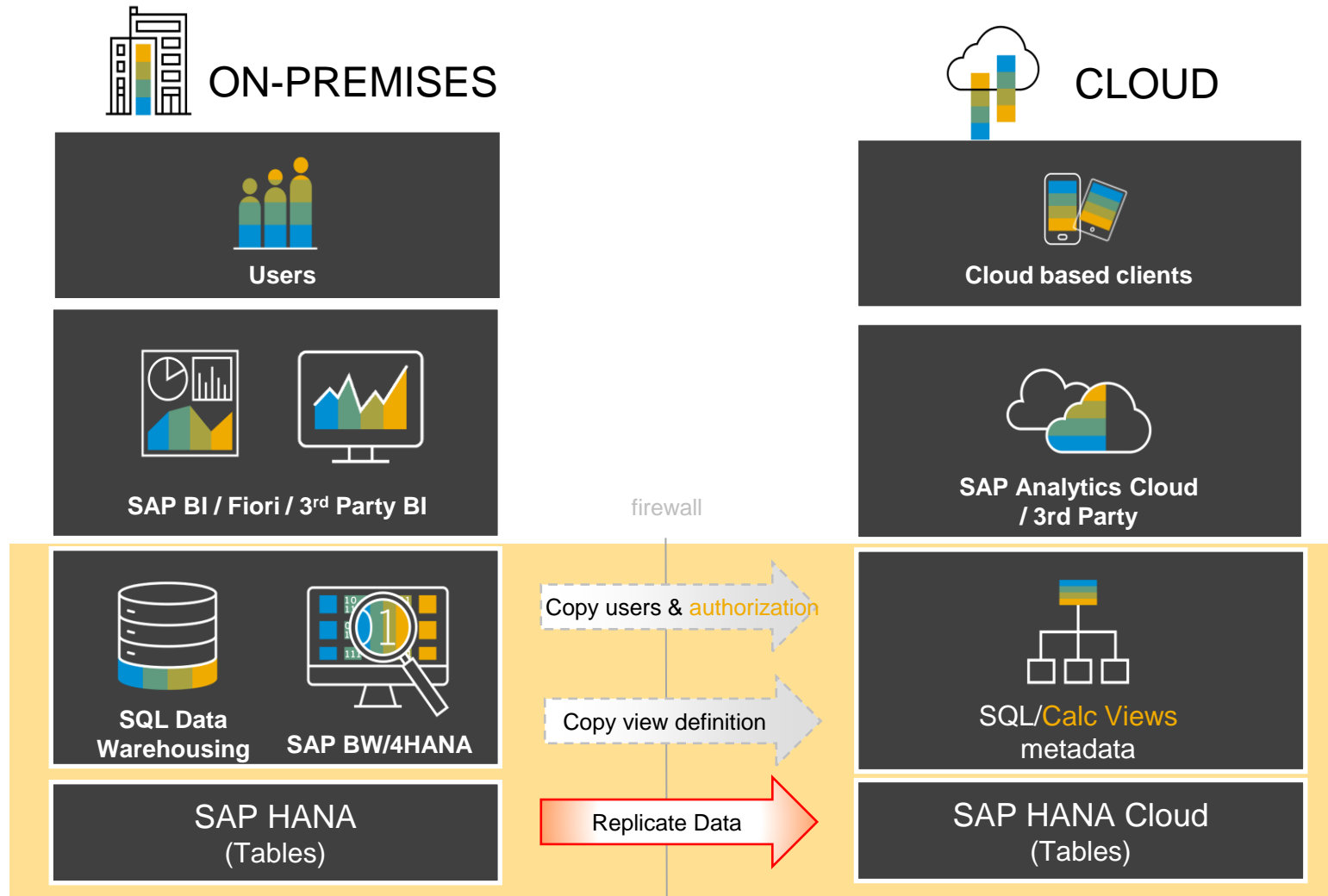
Replicate Data

Extend to cloud without migration by replicating data and copying definitions

Offload workload to cloud during peak times

Run analytics with latest features in SAP HANA Cloud

Integrate external data from various sources by federation

Currently Available   Calc views and authorization in the roadmap

Demo

Connect Any Data Any Where
&
Extend On-Prem SAP HANA to SAP HANA Cloud

Demo: Connect Any Data Any Where

Demo: Extend On-Prem SAP HANA to SAP HANA Cloud

Resources for your Success

SAP Database Migration Factory

Faster Migration | Reduced Business Impact | Maximum Returns

Tools and Accelerators Library

Areas of Advantage :

Database migration planning, DB Scripting, CDS translations, Syntax translations, Issue identification & resolutions

Impact on Migration :

30-40% reduction* of overall migration effort & timelines

Specialized Expertise on HANA Cloud

Areas of Advantage :

Solution Architecture, Migration Approach, Execution tracking and re-alignment with business needs

Impact on Migration :

Bring best practices in migration and customer experiences from Day 1

Alignment with SAP Product Engineering

Migration Factory model is constantly realigned with SAP HANA Engineering and HANA Cloud product roadmap.

Impact on Migration :

Rapid turnaround of product related clarifications, alternative approaches to address unplanned events in migration

*the migration impact assessments are meant as guidelines and is based on standard HANA Cloud deployment scenarios.

SAP Database Migration Factory - Engagement Model

Migration Assessment (No-Cost) ⟶   **Migration Execution** ⟶

Step: 1 – Define Scope
(Capture Information & Analyze)

— 2 Weeks ⟶

Step: 2 – Migration Plan
(Approved by Customer)

— 1 Week ⟶

Step: 3 – Migration Prep & Execution

Information / Access Required

1. Migration Questionnaire
2. Run Pre-Migration Checker (appendix)
3. High level architecture (including interfaces and applications)
4. Access to prod copy of app. source code
5. Access to dev. environment

Access to Customer SME

1. 3-4 Hour remote call with DB SME
2. 3-4 Hour remote call with Apps. SME

Review and Approve

1. To-be Architecture (Optimize)
2. Migration Plan
    1. 3 Env (Dev, QA / Pre-Prod & Prod)
    2. Testing & Sign-off by Customer
3. HANA Cloud DB Sizing

Migration Execution

1. Access to Hana Cloud instance in Dev. QA / Pre-prod and Prod environments
2. Access to Customer SME during migration Execution
3. Implement Migration
    - Database + Data
    - Cloud Application(s)
    - Data Integration Interfaces (ETL, SDI/SDA, SLT etc.)

- Joint development with Customer

- Ramp-up Customer on SAP HANA Cloud

Create Project Plan

Write to migrationfactory@sap.com to get started

Start now with a free trial
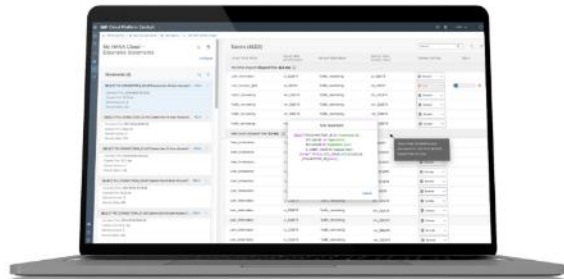
SAP HANA Cloud is available for [free trial](#)

1 Get started with the [SAP HANA Cloud video Trial](#) Mission

2 Extend your learning with the [SAP HANA Cloud Trial learning track](#)

3 Stay informed with [SAP HANA Cloud Getting Started webinars](#)

Find out more

Learn about SAP HANA Cloud

Check out the **sap.com/hanacloud** website, which has valuable resources for fast-tracking your knowledge of SAP HANA and a rich support section designed to help you get the highest quality answers quickly and easily from SAP experts

Read our blog
blogs.saphana.com

Free trial
sap.com/hanacloud

Customers
sap.com/products/hana/customer-reviews.html

Roadmap
•https://roadmaps.sap.com/board?PRODUCT=73554900100800002881&range=CURRENT-LAST#Q2%202020

Get involved in the discussion

Engage with community experts on the SAP Community program to accelerate the development of SAP HANA-powered solutions

Join the conversation
Follow @SAPinMemory
Keep updated with #SAPHANA

Spread the word
twitter.com/SAPInMemory

SAP is here to help.

Contact your local SAP representative

sap.com/corporate/en/company/office-locations.html

Industry recognition for SAP database and data management

Gartner

Recognized as a Leader

- Gartner Cloud Database Management Systems, Q4 2020

- Gartner Magic Quadrant for Operational Database Management Systems, Q4 2019

- Gartner Magic Quadrant for Data Management Solutions for Analytics, Q1 2019

- Gartner Magic Quadrant for Metadata Management, Q4 2019

- Gartner Magic Quadrant for Data Integration Tools, Q3, 2019

- Gartner Magic Quadrant for Data Quality Tools, Q1 2019

FORRESTER®

Recognized as a Leader

- The Forrester Wave™: Data Management For Analytics, Q1 2020

- The Forrester Wave™: Translytical Data Platforms, Q4 2019

- The Forrester Wave™: Enterprise Data Fabric, Q2 2020

-

- The Forrester Wave™: Enterprise Data Virtualization, Q4 2017

Expert Q&A

Thank you.

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