LTIMindtree

Point of View

Reimagining SAP

Modernize Your Data Landscape for the AI-Native Era

Why Modernize Your SAP Data Landscape Now?

The data demands of modern enterprises have evolved dramatically. Organizations today are no longer content with being merely "data-driven"—they must be AI-native, leveraging real-time insights, automation, and predictive intelligence to stay competitive. For SAP customers, this transformation is often hindered by legacy systems like BW 7.x and even BW/4HANA—while once state-of-the-art, they now struggle to keep pace with the speed and scale of innovation.

At the same time, the rise of cloud-native platforms, AI/ML technologies, and composable architecture has fundamentally reshaped enterprise expectations. Business leaders are asking harder questions about data agility, cost efficiency, and innovation velocity. The pressure is on to break down data silos, democratize access, and operationalize intelligence.

In today's fast-paced digital economy, enterprises are under increasing pressure to unlock the full potential of their data. For SAP customers, this means rethinking traditional data architectures and embracing modern platforms that support agility, scalability, and innovation. SAP's Business Data Cloud (BDC), especially when paired with platforms like Databricks, offers a compelling path forward. Together, they deliver a modern data foundation that unifies SAP and non-SAP sources, supports advanced AI/ML workloads, and unlocks innovation across business processes. This isn't just an IT initiative, it's a strategic leap into the future of data.

The Legacy Challenge

SAP's Business Warehouse (BW) has long been a cornerstone of enterprise data management. However, traditional SAP landscapes, especially those built on BW 7.x, are increasingly showing their age and associated challenges. These systems often suffer from:

- **Rigid architecture** that limits scalability and flexibility
- **High maintenance costs** and complex upgrade paths
- **Limited integration** with modern analytics and AI tools

While BW/4HANA offers significant improvements, it is still rooted in a legacy mindset. Enterprises need more than just incremental upgrades; they need a paradigm shift.

With the As-Is Architecture, the data landscape is siloed and the adoption to innovation is limited. The Technology stack is not equipped to support the company's future Roadmap. Lack of a unified platform to facilitate AI innovations.

Enter SAP Business Data Cloud

Business Data Cloud (BDC) is SAP's answer to the evolving data landscape. It provides a unified data fabric that connects SAP and non-SAP data across hybrid and multi-cloud environments. BDC goes further than mere storage and analytics by:

- Embedding intelligence into business processes
- Creating a feedback loop where data improves operations, and operations generate better data
- Bridging silos across departments and ecosystems
- Providing native support for AI/ML workflows

Enterprises can achieve remarkable transformation with the adoption of SAP's Business Data Cloud. This isn't just a typical tech upgrade; it's a complete metamorphosis that turns your business into a highly responsive and adaptive entity.

A Powerful Synergy: Databricks + SAP Business Data Cloud

While SAP Business Data Cloud provides a semantic layer and governance, **Databricks** brings advanced data engineering and AI capabilities. Together, they enable:

- **Native integration** that blends SAP and non-SAP data without expensive workloads
- **Mosaic AI** within SAP Databricks offers to easily develop domain-specific AI applications
- **Unity catalog** provides a trusted foundation to enable data security and governance

This synergy empowers SAP customers to build intelligent applications and predictive models faster and more efficiently.

From Data-Driven to AI-Native

Being "data-driven" is no longer a competitive advantage, it is an imperative for modern enterprises. The future belongs to AI-native enterprises that embed intelligence into every process. SAP Business Data Cloud supports this shift by:

- **Accelerating AI adoption** with clean, contextual data
- **Enabling real-time decision-making** with live data streams
- **Supporting composable architectures** for agile innovation

With AI-native capabilities, businesses can move from reactive analytics to proactive intelligence that drives better decision-making and the ability to pivot and innovate for long-term success.

Migration Pathways: Choose Your Modernization Journey for SAP Business Data Cloud

SAP Business Data Cloud (BDC) offers flexible modernization pathways, tailored to their unique architectural landscape, data maturity, and strategic transformation goals.

01

Greenfield Approach

Start fresh with SAP BDC without any technical debt

02

Brownfield Approach

- Migrate existing SAP BW or BW/4HANA models and logic to SAP BDC
- Migrate existing SAP datasphere models and logic to SAP BDC
- Migrate existing SAP Enterprise HANA on-premise models and logic to SAP BDC

03

Hybrid Approach

Integrate the existing Databricks analytics platform with SAP BDC to enable a coexisting strategy

01

Greenfield Approach

This approach is suitable for customers that have S/4HANA or SAP RISE for core business operations and want to start clean slate without any technical debt.

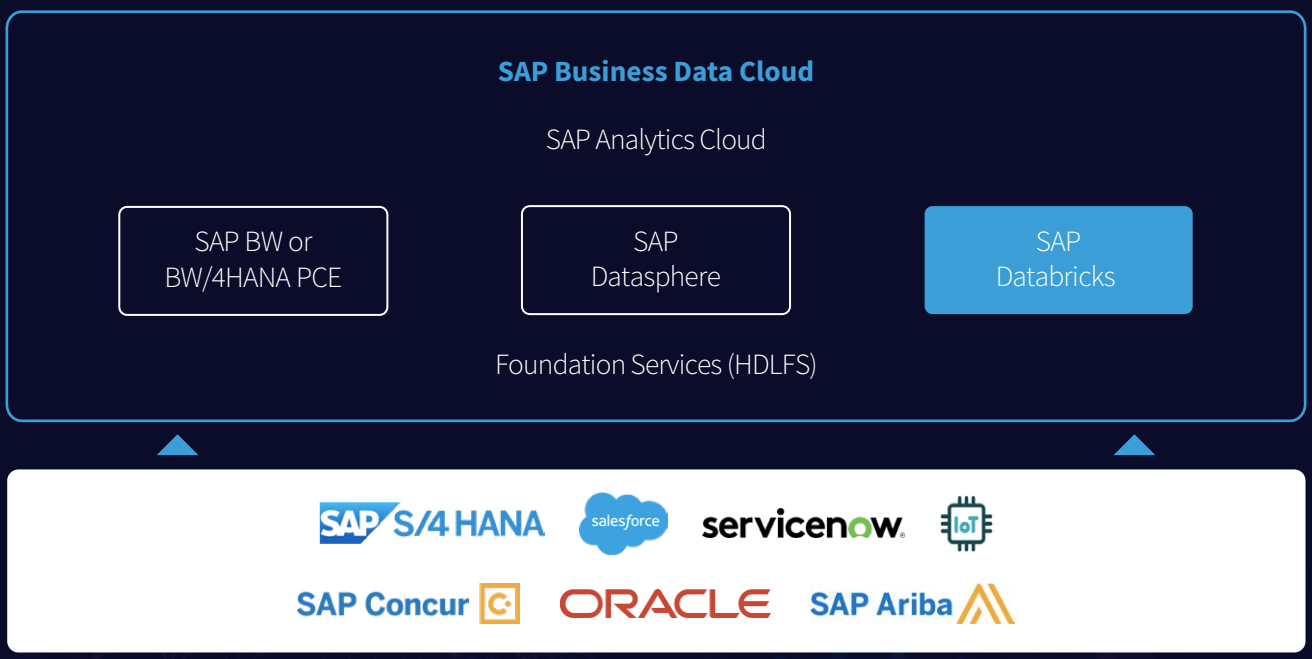

Figure 1: Greenfield Approach

SAP Business Data Cloud is the ideal choice for this scenario, offering faster time-to-market through out-of-the-box availability of S/4HANA data products in its Foundation Services layer. Optionally one can deploy Insight Apps, which are SAP managed pre-built applications delivered within SAP BDC. Governance is streamlined through virtual data access, eliminating duplication and enabling unified control across all use cases. SAP Databricks Unity Catalog further enhances governance by managing structured and unstructured data, machine learning models, notebooks, dashboards, and files within a single, integrated environment.

SAP Databricks powers AI/ML workloads, while SAP Datasphere on BDC delivers enterprise-grade business intelligence (BI). ETL workloads are efficiently executed using SAP Datasphere's native data integration services. Operational reporting is managed via S/4HANA Embedded Analytics, which complements the overall strategy.

02 Brownfield Approach

2a. Migrate existing SAP BW or BW/4HANA models and logic to SAP BDC

This approach is suitable for customers with S/4HANA or SAP RISE for core business operations and using SAP BW or BW/4HANA for data warehousing.

Integrating SAP BW or BW/4HANA with SAP Business Data Cloud enables streamlined modernization through cloud-native scalability and innovation. To modernize their data landscape, organizations can begin by migrating their existing SAP BW or BW/4HANA systems to the Private Cloud Edition (PCE). By leveraging the Data Product Generator, SAP BW objects can be seamlessly converted into SAP BDC data products.

Gradually, BW use cases can be transitioned to SAP Datasphere, where BI workloads are supported through BW data products, and AI/ML workloads can be executed using SAP Databricks on SAP BDC. This approach ensures a scalable, cloud-native foundation for analytics and innovation.

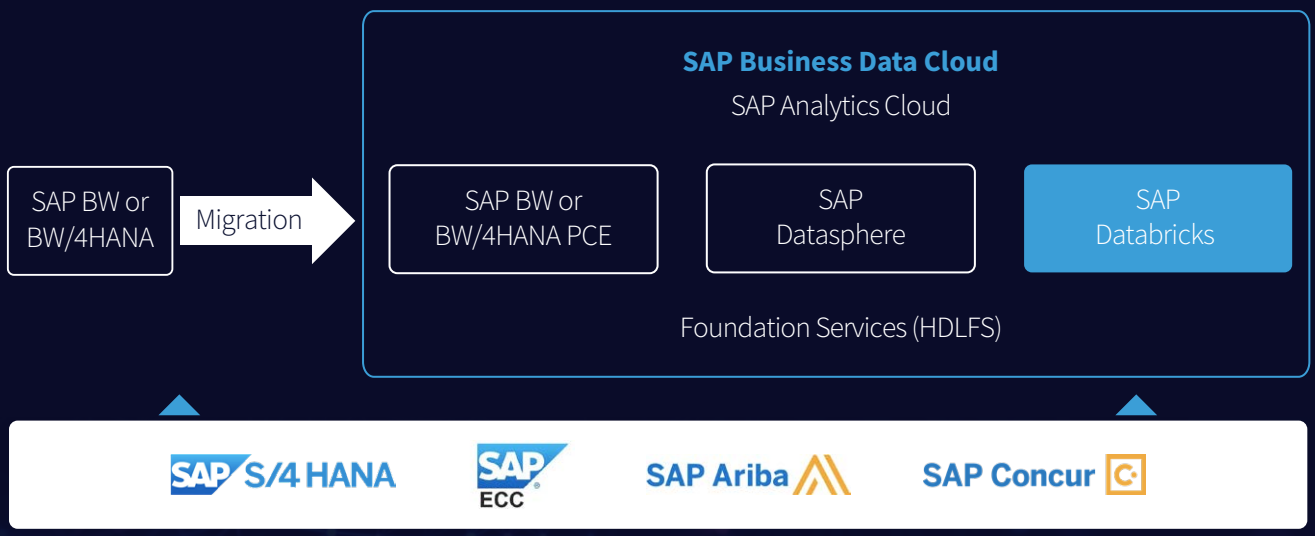

Figure 2: Brownfield Approach (Migrate BW to BDC)

2b. Migrate existing SAP datasphere models and logic to SAP BDC

This approach is suitable for customers with S/4HANA or SAP RISE for core business operations and using SAP Datasphere for data warehousing.

Migrating from SAP Datasphere to SAP Business Data Cloud (BDC) represents a strategic shift towards a more unified, scalable, and cloud-native data foundation. This transition allows organizations to consolidate their data assets, streamline governance, and unlock advanced capabilities such as AI/ML.

As part of SAP's managed services, organizations can re-wire their existing SAP Datasphere environment to SAP BDC, allowing them to maintain and utilize previous investments in Datasphere.

This transition allows BI workloads to be seamlessly executed on SAP Datasphere, while AI/ML workloads are offloaded to SAP Databricks on BDC for optimized performance and scalability.

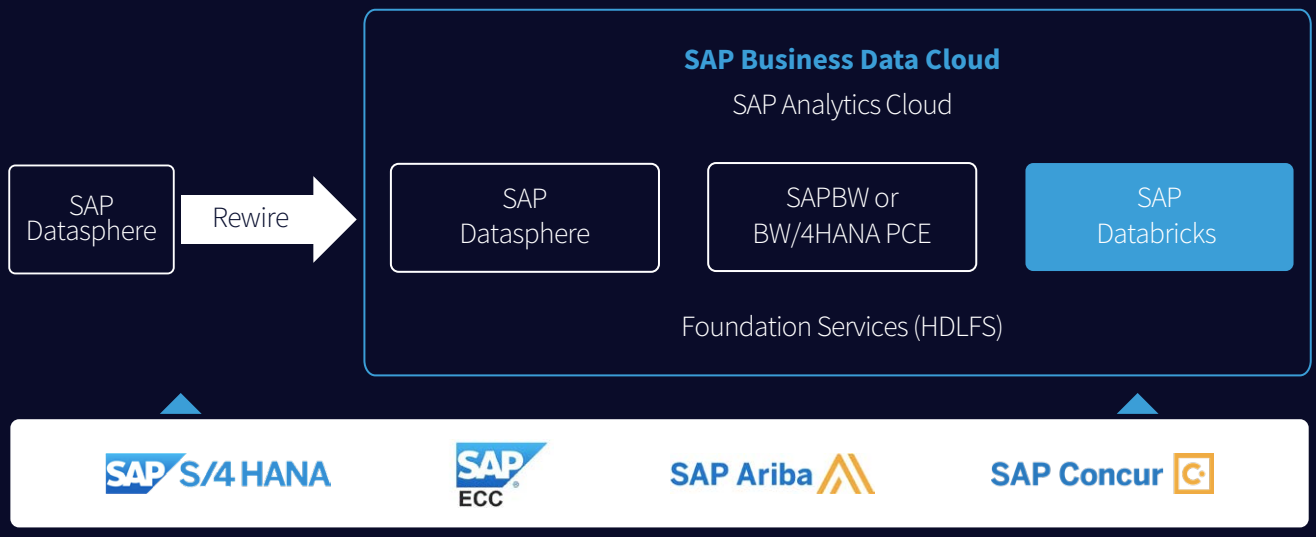

Figure 3: Brownfield Approach (Rewiring Datasphere to BDC)

2c. Migrate existing SAP Enterprise HANA on-premise models and logic to SAP BDC

This approach is suitable for customers with S/4HANA or SAP RISE for core business operations and using SAP Enterprise HANA on-premise for data warehousing.

Organizations can modernize their data infrastructure by migrating their Enterprise HANA (on-premise) to SAP Business Data Cloud which enables organizations to move away from legacy systems and embrace a cloud-native architecture that supports scalability, agility, and advanced analytics.

The modernization journey begins by migrating the on-premise Enterprise HANA system to SAP HANA Cloud. Once migrated, the HANA Cloud instance can be seamlessly extended as a native component of SAP Datasphere, allowing direct consumption of existing assets such as calculation views, tables, and procedures. This approach enables organizations to maximize existing investments while accelerating the deployment of data-driven use cases in a cloud-native environment.

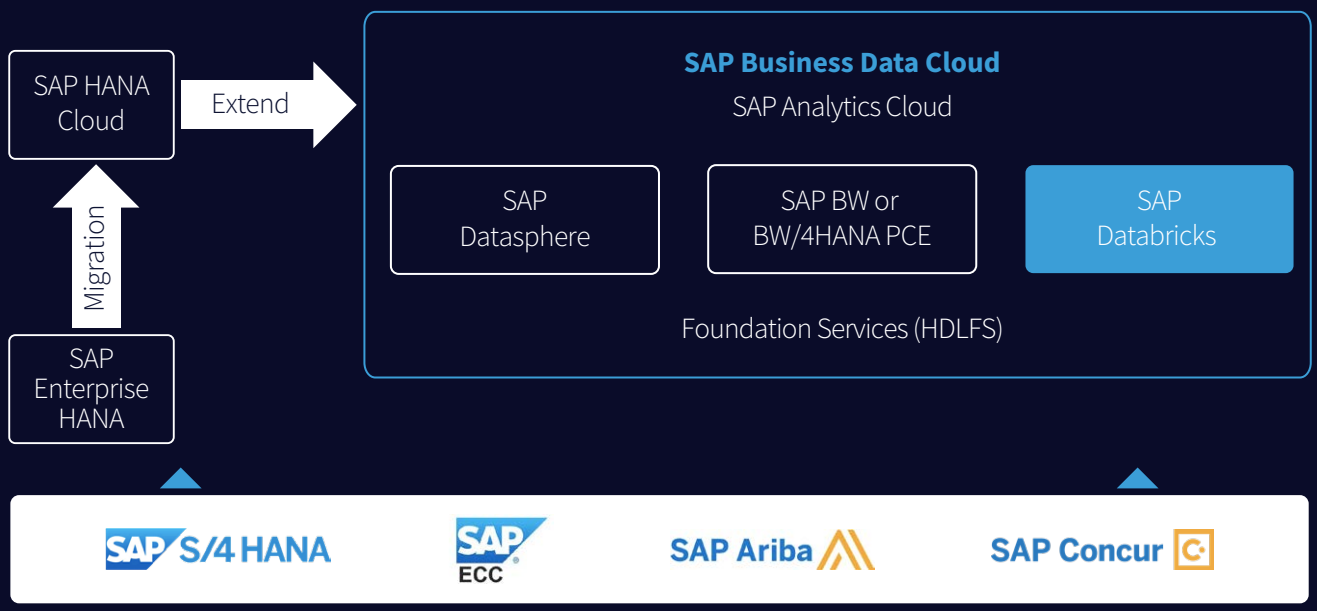

Figure 4: Brownfield Approach (HANA to BDC)

03 Hybrid Approach

This approach is suitable for customers with S/4HANA or SAP RISE for core business operations together with lot of non-SAP systems and using Databricks as Data Analytics platform.

Organizations adopting SAP Business Data Cloud (BDC) can take advantage of a hybrid architecture that supports both SAP-centric and non-SAP data use cases. New SAP-centric workloads can be efficiently handled using SAP Databricks, while traditional Databricks instances continue to manage non-SAP data. The BDC-Databricks Connect Service enables seamless integration of SAP and non-SAP data via Delta Share for unified analytics and machine learning. For business intelligence (BI) workloads, SAP Datasphere remains the preferred platform, leveraging Data Products to deliver trusted insights across the enterprise.

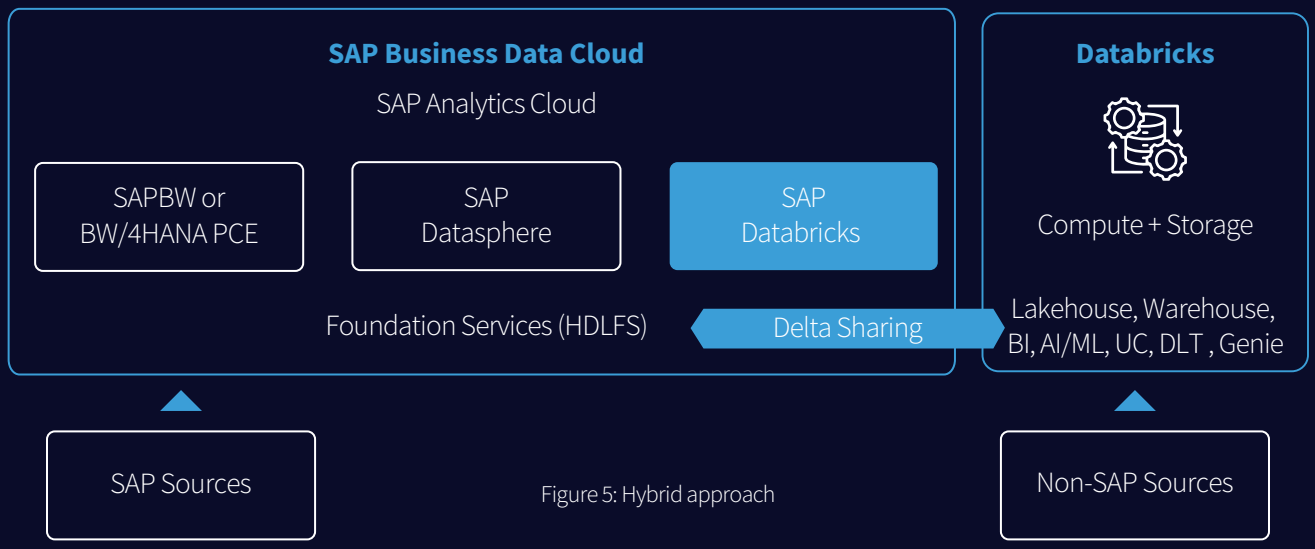

Figure 5: Hybrid approach

Conclusion

Your Future-Ready Data Landscape Starts Now

Legacy SAP systems may have served your business well, but they were built for a different era—one where static reports and batch processes were enough. In today's world of real-time decisions and AI-driven operations, staying competitive demands more.

SAP Business Data Cloud, in synergy with Databricks, provides the flexibility, intelligence, and scale needed to modernize without compromise. Whether you're pursuing a greenfield, brownfield, or hybrid path, the modernization journey is no longer optional—it's mission-critical.

The future belongs to enterprises that don't just manage data but activate it. The ones that don't just collect insights but turn them into action. The question is not whether you should modernize, but how quickly you can get there—and how well you'll harness the full power of your data once you do. Now is the time to lead that transformation because in the AI-native era, speed, intelligence, and adaptability are everything.

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Anup Shankar B S is a seasoned subject matter expert specializing in the modernization of data platforms, with a strong focus on transitioning from SAP BW and SAP HANA to modern cloud-based data ecosystems. With over 18 years of experience in data analytics, he brings deep expertise across SAP technologies—including SAP BW, HANA, Datasphere and SAP Analytics Cloud - as well as cutting-edge cloud data warehousing solutions like Snowflake and Databricks. His work bridges legacy enterprise systems with scalable, future-ready architectures, enabling organizations to unlock greater value from their data.

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Wayeez is a senior architect, specializing in SAP analytics and AI-driven solutions. He wears multiple hats—from leading an SAP analytics Center of Excellence to spearheading digital transformation initiatives that modernize enterprise data landscapes. With over two decades of experience, Wayeez has orchestrated complex enterprise transformations and guided global teams through projects that bridge legacy systems with cutting-edge cloud platforms. He also shares his expertise as a thought leader, contributing to company blogs and mentoring programs, reflecting a passion for creative problem-solving and continuous learning.