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SAP to Azure Synapse Migration Guide

A comprehensive roadmap
for executives!

Contents

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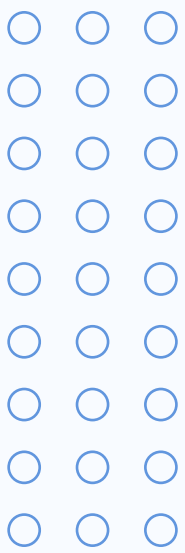
83% of the data migration project fails or cost goes off the rails

– Gartner

Embarking on a cloud journey & moving out of legacy systems is an appreciable decision. But is your future data platform built from the ground up to render the cloud native benefits? Do you have an in-house expertise to successfully modernize the legacy systems?

It's a puzzle!

Today's businesses are consuming diverse datasets from different systems, structures, and formats at a whopping volume. You need a warehouse that aggregates, stores, manages, and safe keeps all your datasets at the center of your business for data democratization. And most importantly your warehouse must integrate with BI, AI, embedded analytics, data engineering tools, and third-party systems!
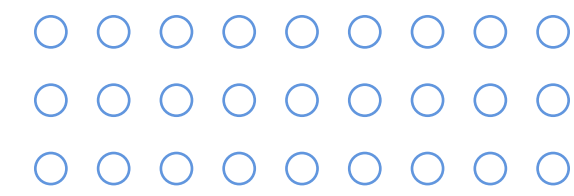
For years together, legacy systems such as SAP lock in their customers with a comprehensive suite of products and their rigid architecture that doesn't support huge volume, velocity & variety of datasets. SAP is reluctant to store non-SAP data, various structures, and integrate third-party tools which are crucial to modern businesses.

Another shocking news for SAP customers is that,

SAP announces end-of-life for its Business Suite 7 software by 2027.

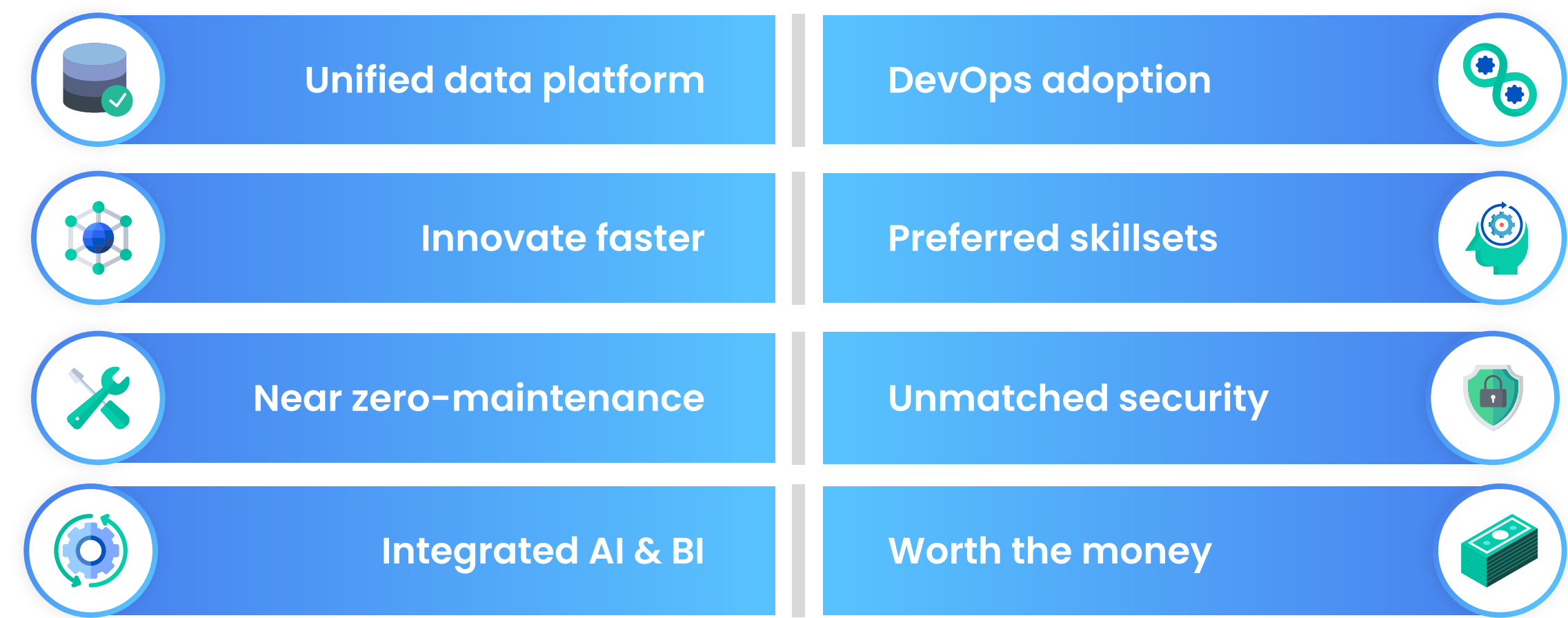**So, you have no other option than migrating to cloud data platforms!**

SAP does offer Data Warehouse Cloud (DWC) in combination with BW & HANA suite. But the existing SAP cloud customers have trouble with the compatibility of external datasets, tools, elasticity, DevOps adoption, downtime, manpower & much more.

Read More: Why must businesses move on from SAP.docx

So, you need a unified platform to ingest, store, discover, manipulate, manage, and serve data for business intelligence & advanced analytics.

 And our go-to recommendation for unified experience is **"Azure Synapse Analytics"**!

SAP to Azure Synapse Migration Roadmap – Your way to cloud-first data estate!

Unified data platform	DevOps adoption
Innovate faster	Preferred skillsets
Near zero-maintenance	Unmatched security
Integrated AI & BI	Worth the money

Being a trusted Microsoft Gold Partner of Data Analytics Platform for decades, we help you in smooth SAP to Azure Synapse migration with an intellectual asset library & streamlined roadmap.

Without further ado, let's explore our SAP to Azure Synapse migration roadmap in detail!

**SAP to Azure Synapse Migration Roadmap – Your way to cloud-first data estate!**

Discover	Rationalize	Migrate	Remediate	Go Live	Support
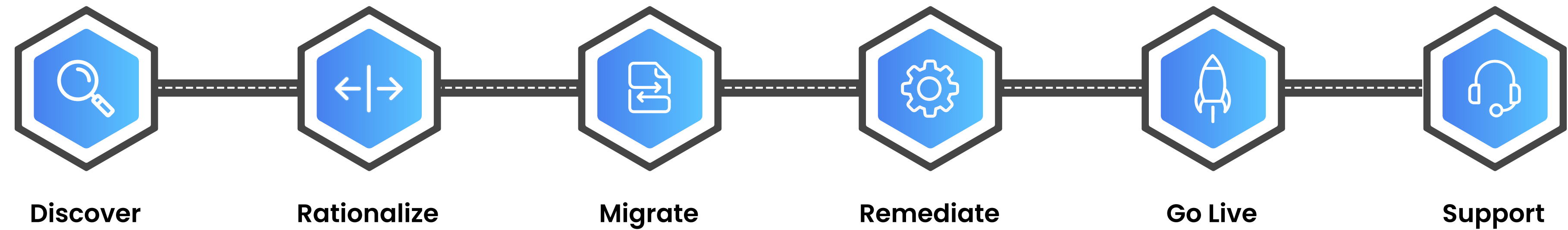
Discover

Understanding nooks & crannies is the kick-start!

Outlining the existing architecture

Our team dives in to explore your SAP data landscape and gathers the following details.

- List of tables in SAP BW, SAP ECC, & SAP S4.
- Table structures
- Data from Graphical User Interface (GUI) for in-depth analysis
- Interdependencies
- Data source integration points
- Accessibility permissions based on roles
- Performance metrics

Based on these key findings, we develop an "as-is" architecture diagram. With this diagram, we define the challenges in migration and brainstorm the possible mitigation strategies in prior.
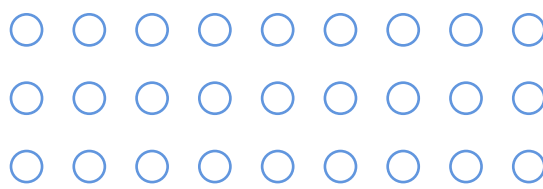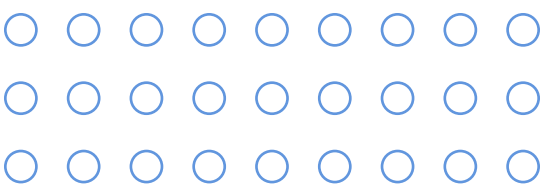
Proposing the future-architecture

Considering the existing SAP data landscape, we design a future-first Azure Synapse data model that meets your business needs. Our team crafts a detailed future-state architecture that encompasses the end-to-end data lifecycle from ingestion to governance.
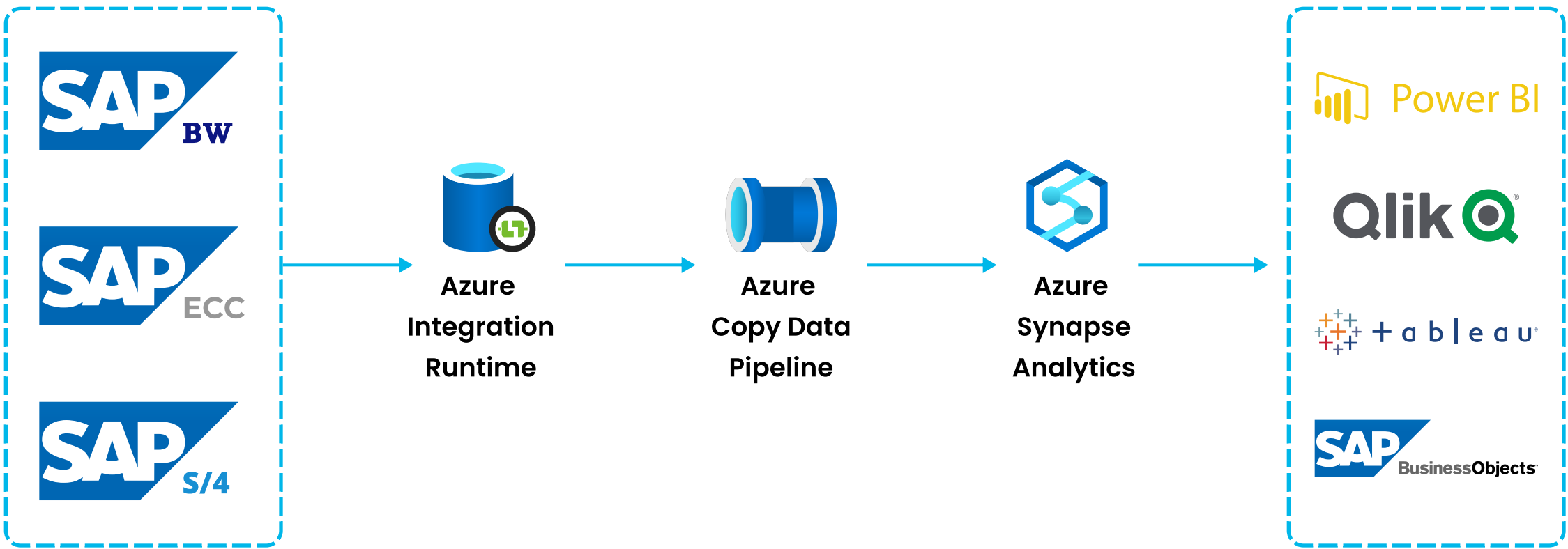
Rationalize

Categorizing data to establish migration strategy!

Data streamlining

With the as-is architecture diagram, we dive deeper into the legacy data model, data volume, structure of datasets, and other factors. This helps in deciding the reengineering requirements, migration strategy, and efforts required to attain the future state.

To decide on the historical data load approach, we consider SAP data volumes as a key factor...

- For minimal data volume, we plan for a full refresh on a daily basis.

- For medium & huge data volumes with change tracking columns (CREATED, MODIFIED), we plan for incremental loads.

- For medium & huge data volumes without change tracking columns, we plan for a full load with proper partitions.

Successively, our data engineers will design a landing zone architecture to decide on which data settles where in the future data architecture.

Defining the deadlines & success factors

Soon after deciding the future Azure Synapse data model, migration approach, and landing zones, we set achievable deadlines and budgets. Further, we communicate our plan to your executive team and brainstorm the business expectations, possibilities, and desired success factors.

Some of the common success factors of our global clients were:

- Center of excellence to democratize data

- Appealing data stories with a real-time reporting dashboard

- Meeting the SLA by delivering appropriate reports to stakeholders

- Embedding advanced analytics to make strategic business decisions

Migrate
Executing the strategies the right way!

We segment the migration implementation into 4 stages.

Data integration points

Our team kick-starts the migration phase by establishing data integration points from SAP application to Synapse warehouse by leveraging the Azure Integration Runtime. We connect SAP BW, SAP ECC, & SAP S4, and other allied applications using SAP-linked service connectors & datasets.
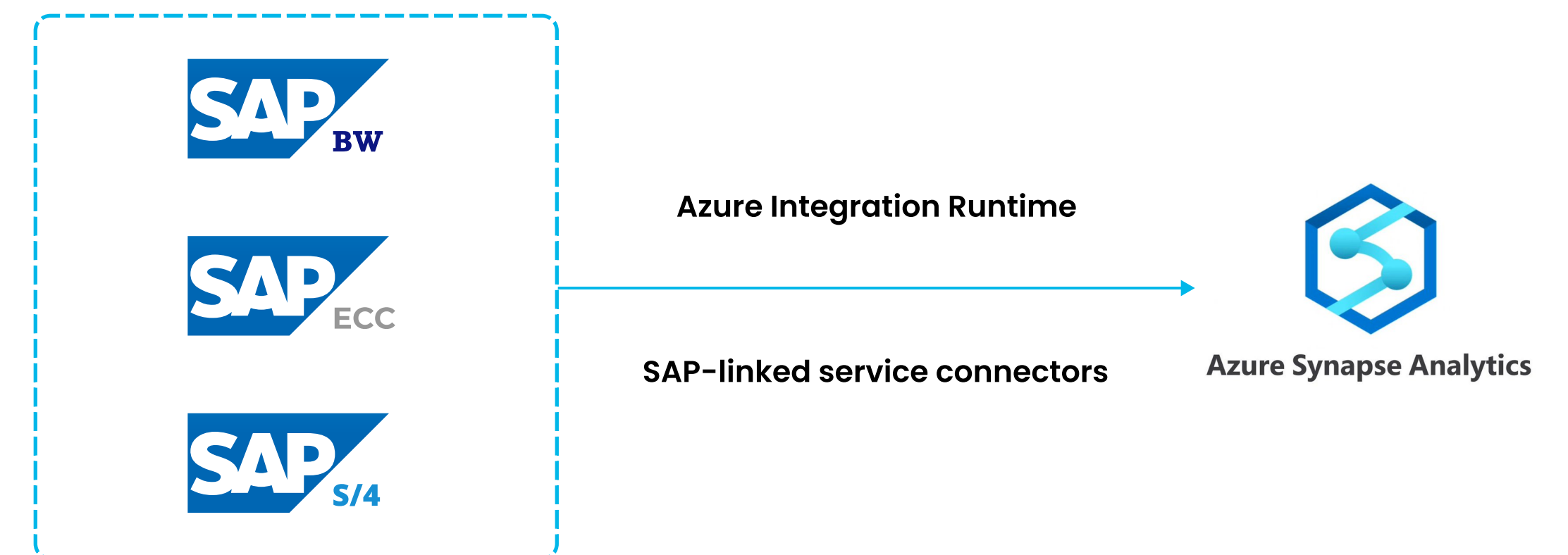

Further, we utilize the Remote Function Call (RFC) tables in SAP applications to dynamically create filter queries that help in incremental data processing.

Database objects

We gear up the Synapse environment by creating databases, schemas, and objects to store SAP data. Based on the proposed future architecture, we decide on the warehouse sizing and set up the data flow pipelines to Synapse platform.
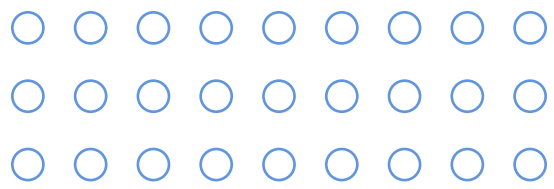
Data

Upon setting up the Synapse platform, we begin loading the historical data from SAP to Synapse. We build dynamic data load pipelines (full/incremental) to extract data from SAP. These SAP datasets will be loaded into Azure Data Lake as parquet files using Azure copy data pipelines. The data is cleansed, transformed, and stored in appropriate zones as Delta tables. Successively, Azure Data Flow loads the confirmed SAP data to Synapse Warehouse. In case of any refactoring needs, we customize and load data using Azure data flow components. We orchestrate the end-to-end data lifecycle using a master pipeline in Synapse platform for easy data governance.
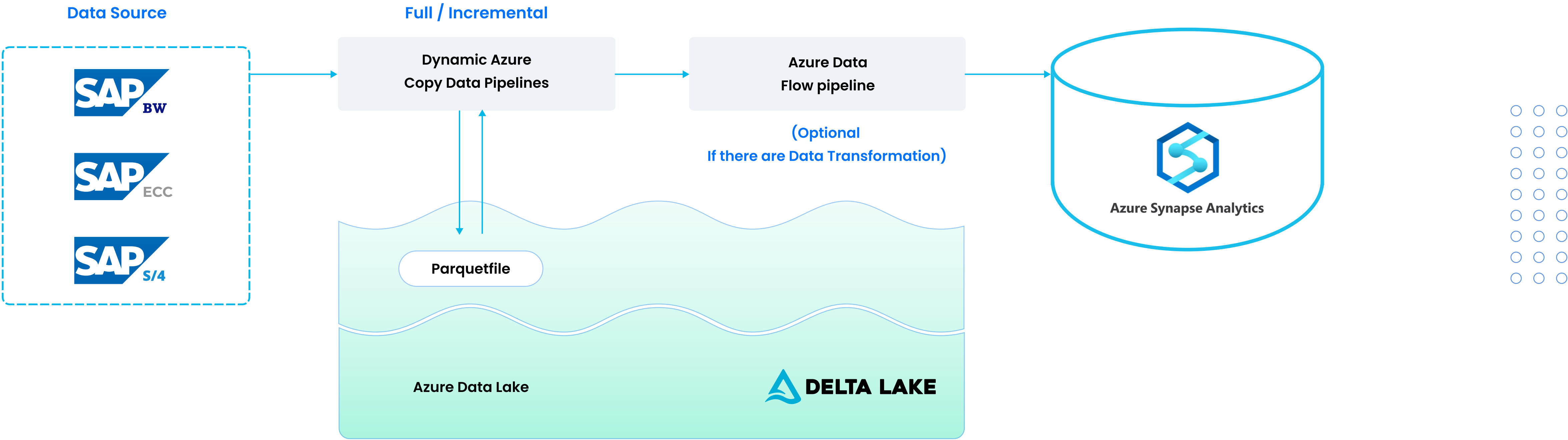
Synchronizing systems

After creating the data load pipelines and loading historical data, we run the SAP systems and Synapse platform in parallel. We build data quality pipelines to ensure data accuracy, performance, and zero data loss.

Remediate
Reconcile & mitigate inconsistencies

Identifying migration issues

By running the systems in parallel, our team identifies the data inconsistencies, performance issues, and other deviations in success factors of SAP to Azure Synapse Analytics migration. We prepare the root cause analysis and brainstorm the best-possible mitigation strategies.

Propose & implement mitigation strategies

Our data specialists conclude on the best-fit mitigation strategy and implement them if there are any migration issues. With our standard operation procedure (SOP), you can identify the responsible person, technical lead, third parties involved, and much more details about migration issues. We segregate the issues that need to be resolved post-migration and do have focus on them at the right time.

Go Live
Planning for the sunset of SAP systems

We brainstorm the plans for cutover of SAP BW/ SAP DWC/SAP HANA suite with your executive teams. We insist on communicating the cutover plans to SAP users prior so that they can organize the precursors and plan for the Azure Synapse Analytics platform shift.

Post
production support

User Adoption Training

SAP to Azure Synapse migration doesn't stop with retiring SAP. Your organization must embrace the new data landscape and accelerate productivity to achieve desired success factors. Our team helps you with knowledge transfers, user adoption, organizational change management plans, and workshops for hassle-free synapse adoption.

Communicating the benefits

In comparison with the expected success factors documentation, we highlight the actual outcomes and benefits of Azure Synapse migration to the executive teams. We complete SAP to Azure Synapse Analytics migration with guaranteed support based on SLA!

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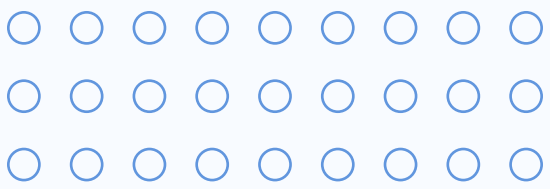
What next?

## Let's build a unified data estate for your organization!

Get started with Azure Synapse Analytics readiness assessment! Before investing your capital, you need to assess whether Azure Synapse is the best solution for all your data workloads and business model.

With years of hands-on expertise in Azure Synapse migration, we hold a plethora of intellectual accelerators to ensure a smooth & quick transition.

- Automated Inventory Pipelines
- Online Historical Load Frameworks
- Dynamic DataOps Pipelines
- Reusable JSON Templates
- Data Reconciliation Frameworks

Our responsibility doesn't stop with designing & implementing Synapse cloud migration strategy. We outstrip the migration scope and propose a continuous enhancements strategy to help you outperform the competitors!

Experience the cloud-native benefits, achieve analytics maturity, build data-intensive products, embed AI & ML, and much more with Azure Synapse Analytics!

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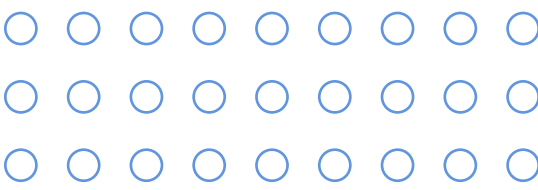
Embark on a unified cloud data estate journey with Azure Synapse platform!

Let's connect!

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