

Limiting Agentic AI Decision Risk & Driving ROI

With a Unified, Governed, Real-Time Data Foundation

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Data Strategy

Agentic AI

Governance by Design

Sovereignty

Zero-Latency Architecture



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Speaker Introduction

15+ years as a technology and strategy leader with expertise in data, analytics & AI, cybersecurity, and go-to-market transformation across highly regulated markets.

Author of ***Orchestrating Intelligence: The AI Playbook*** — practical frameworks to build competitive moats through AI.

At EDB, drives technology strategy focused on data sovereignty, AI-ready foundations, and measurable business outcomes.



One Data to AI Platform



Agentic AI



Converged Analytics



Sovereign Infrastructure

THE UNCOMFORTABLE TRUTH

Most AI initiatives are not failing because of the model.

80%

of IT budget consumed maintaining
legacy infrastructure vs. innovating

Deloitte / KPMG

24hrs+

average OLTP-to-OLAP latency in
enterprise batch architectures

What Customers Are Saying

6–12mo

release cycles for simple product
changes in legacy data orgs,
regulated industries

Gartner

They are failing because the data foundation was never built for AI.

Four structural gaps preventing AI from delivering measurable business value

Innovation Tax

80% of IT budget consumed by legacy maintenance.

Vendor lock-in (Teradata, Oracle, Snowflake) extracts maximum cost while starving AI initiatives of investment.

→ *Platform consolidation + open-source foundation*

Visibility Gap

ETL batch creates data that is hours or days stale when agents need to act.

Real-time fraud detection, in-moment personalization, and autonomous operations all require real-time data.

→ *Zero-ETL transactional-to-analytical convergence*

Sovereignty Gap

Cloud-only architectures compromise compliance & security mandates.

Sensitive data traversing external networks is simultaneously a compliance failure and a competitive risk.

→ *Governance by Design: bring AI to data, not data to AI*

Logic Gap (Dark Data)

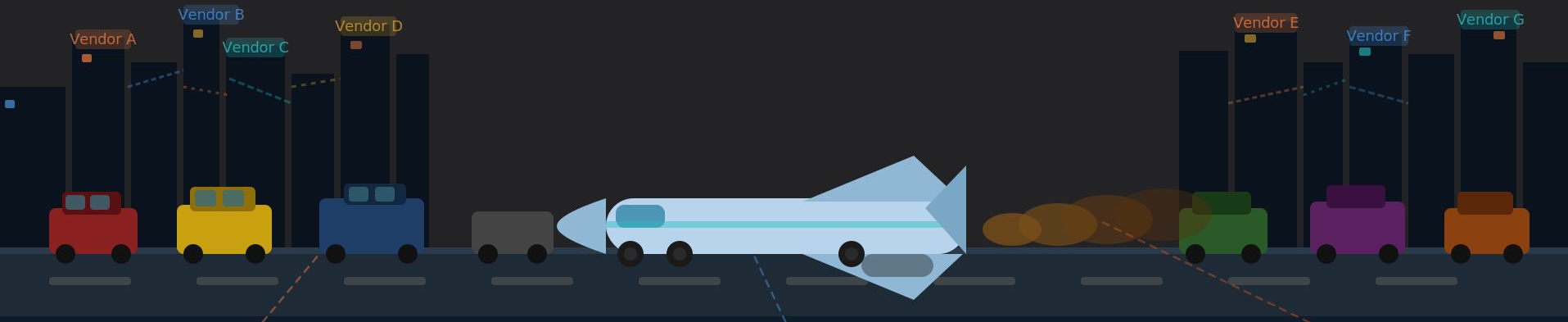
Fragmented silos prevent agents from accessing unified context.

AI acting on partial, disconnected information produces confident errors at machine speed — reputational and operational risk at scale.

→ *Unified semantic data layer across all workloads*

WITHOUT A DATA FOUNDATION — THE REALITY TODAY

You bought a supersonic jet. You are taxiing it down a congested city street — running on contaminated fuel.



THE CONGESTED STREET

Siloed tools. Fragmented solutions. Multiple vendors, multiple tech hops, zero shared context. Every tool a dead end.

Your current data architecture

YOUR AI INVESTMENT

Supersonic. Powerful. Built for altitude. Completely the wrong context — no runway, no infrastructure to fly from.

Expensive. Grounded. Going nowhere.

THE CONTAMINATED FUEL

ETL delays. No lineage. No governance. Data hours old before AI sees it. Models hallucinate on stale data.

Confident errors at machine speed

The solution: build the highway first — then the jet flies as designed.

EDB Postgres Distributed → WarehousePG · real-time · governed · zero-latency · sovereign

You cannot automate what you have not validated.

01 CRAWL

Validate the Data Foundation

- Audit data freshness & pipeline latency
- Eliminate brittle ETL — unify OLTP + OLAP
- Establish governance at the data layer
- Benchmark current TCO vs. open alternative

Metric: Latency ms · Pipeline failure rate · TCO

02 WALK

Prove Value with Governed GenAI

- Deploy RAG on validated, fresh data only
- Measure AI accuracy and. data freshness
- Build Sovereignty by Design
- Prove ROI on targeted use cases first

Metric: AI accuracy · Time-to-insight · Cost/inference

03 RUN

Scale Agentic & Autonomous AI

- Agents operating 24/7 on real-time context
- Autonomous action with human-in-the-loop oversight
- AI Governance at the Data Layer
- Measure business outcomes at scale

Metric: Decisions/hour · Error rate · Revenue captured

Governance doesn't kill innovation. Governance as an afterthought does.

✗ THE OLD MODEL

Data → Cloud AI Service

- Sensitive enterprise data traverses external networks
- Governance audit bolted on at deployment — after breach risk exists
- Cannot answer: what data did my model use and why?
- Every inference call sends IP outside your perimeter
- Audit failure = AI initiative shutdown, board exposure

✓ SOVEREIGNTY BY DESIGN

AI → Comes to the Data

- AI runs inside your trusted database architecture — data never leaves
- Data masking + RBAC active before any model sees a single record
- Full lineage: what data, why, from where — auditable by design
- Sensitive data never traverses external networks or cloud services
- Governance becomes a competitive moat, not a constraint

Most leaders measure the application layer. The ROI lives in the foundation.

TIER 1

Data Foundation

- Data Freshness: time from event to AI-ready state
- Pipeline Reliability: ETL failure rate & mean time to repair
- Data Fidelity: accuracy of the transactional-to-analytical sync

If the model feeds on stale data, you are funding hallucinations at scale — not ROI.

TIER 2

Operational Efficiency

- Infrastructure TCO: cost per inference, platform consolidation savings
- Time-to-Value: raw data event to AI-driven action — target milliseconds
- Workload Consolidation: vendors, platforms, and pipelines eliminated

Operational savings compound. Every pipeline eliminated is engineering capacity returned to innovation.

TIER 3

Business Impact

- Revenue Capture: in-moment offers vs. retrospective batch campaigns
- Risk Reduction: incidents detected before vs. discovered after impact
- Engagement Lift: conversion rates from hyper-personalised AI actions

This is what the board cares about. It only exists when Tiers 1 and 2 are solid.

What is converging?

Transaction Systems

EDB Postgres Distributed

Data Warehouse

EDB WarehousePG

Converged Data to AI Platform

Real-time Business Insights & Action

through conversational & agentic automation
for petabytes of open data & transaction data

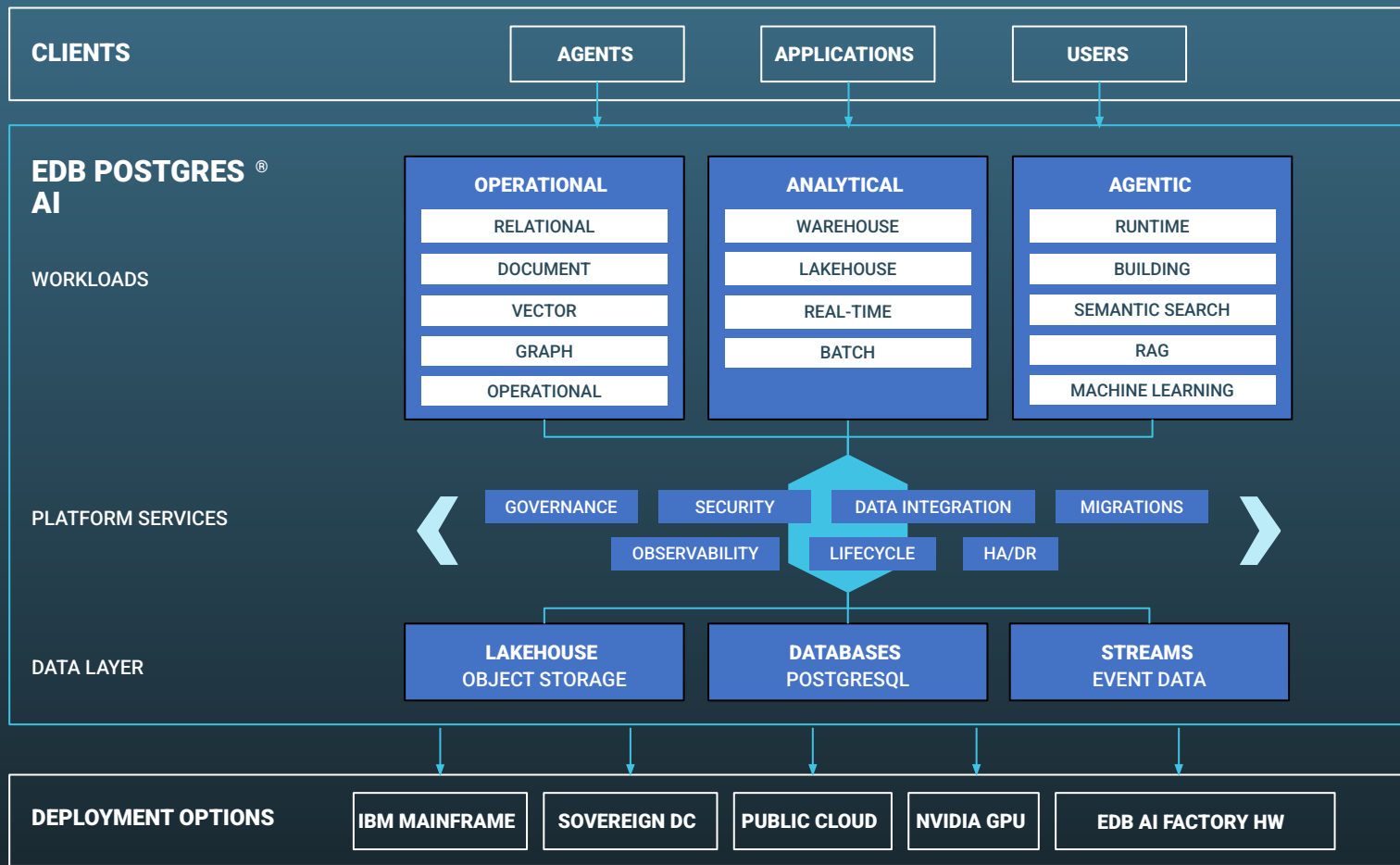
Agentic AI

EDB AI Factory + NVIDIA GPUs

Open Lakehouse

EDB Analytics Accelerator

EDB Postgres AI - Unified Data Platform



Step 1: Eliminate Movement & Optimize with Converged Analytics



Capital Efficiency

Consolidate transactional and analytical stacks.

Optimize storage infrastructure.



Revenue Preservation

Catch fraud or trigger the Next Best Action in milliseconds — while the customer is still active, not hours later.

From forensics to prevention. From campaigns to hyper-personalized moments. Real-time matters.



Sovereign & Open

Open standards like apache Iceberg-native storage eliminates proprietary lock-in.

Meets strict data sovereignty and compliance mandates, reduces risk.

Full data portability across any cloud or on-prem infrastructure.

Large Scale and/or Real-Time Streaming Analytics on OSS

Enterprise-grade performance for your most demanding reporting and ML workloads

Predictable Performance

Unlike serverless cloud warehouses with surprise billing, EDB provides sovereign analytics options with support for real-time streaming and large scale analytics..

EDB WarehousePG provides a dedicated high-performance MPP analytical engine for massive-scale complex joins and reporting — at 58% lower TCO than cloud database warehouses.

58% lower TCO

vs. cloud data warehouses

Zero ETL Friction

Data moves natively from Postgres Distributed (transactional) to analytical environments using the EDB analytics accelerator extension.

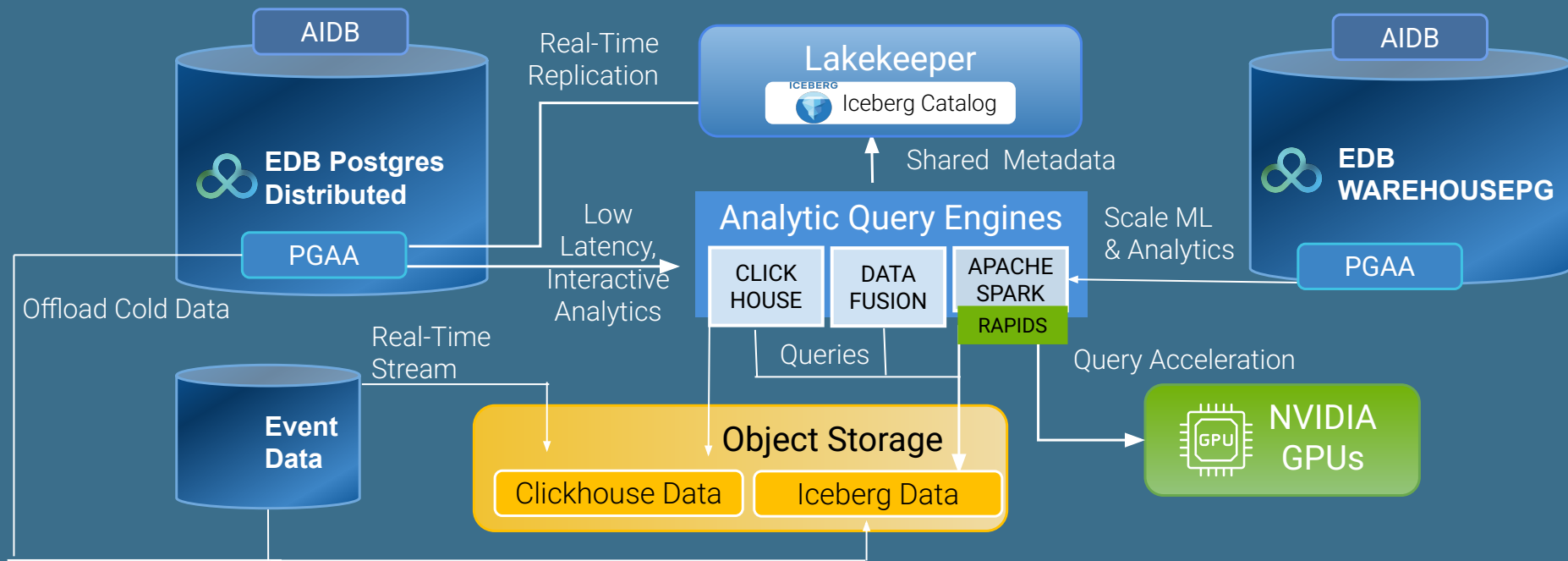
Your PB-scale reports are always based on high-fidelity, fresh data — not week-old exports or manual pipelines.

Real-time synchronization

zero manual pipeline

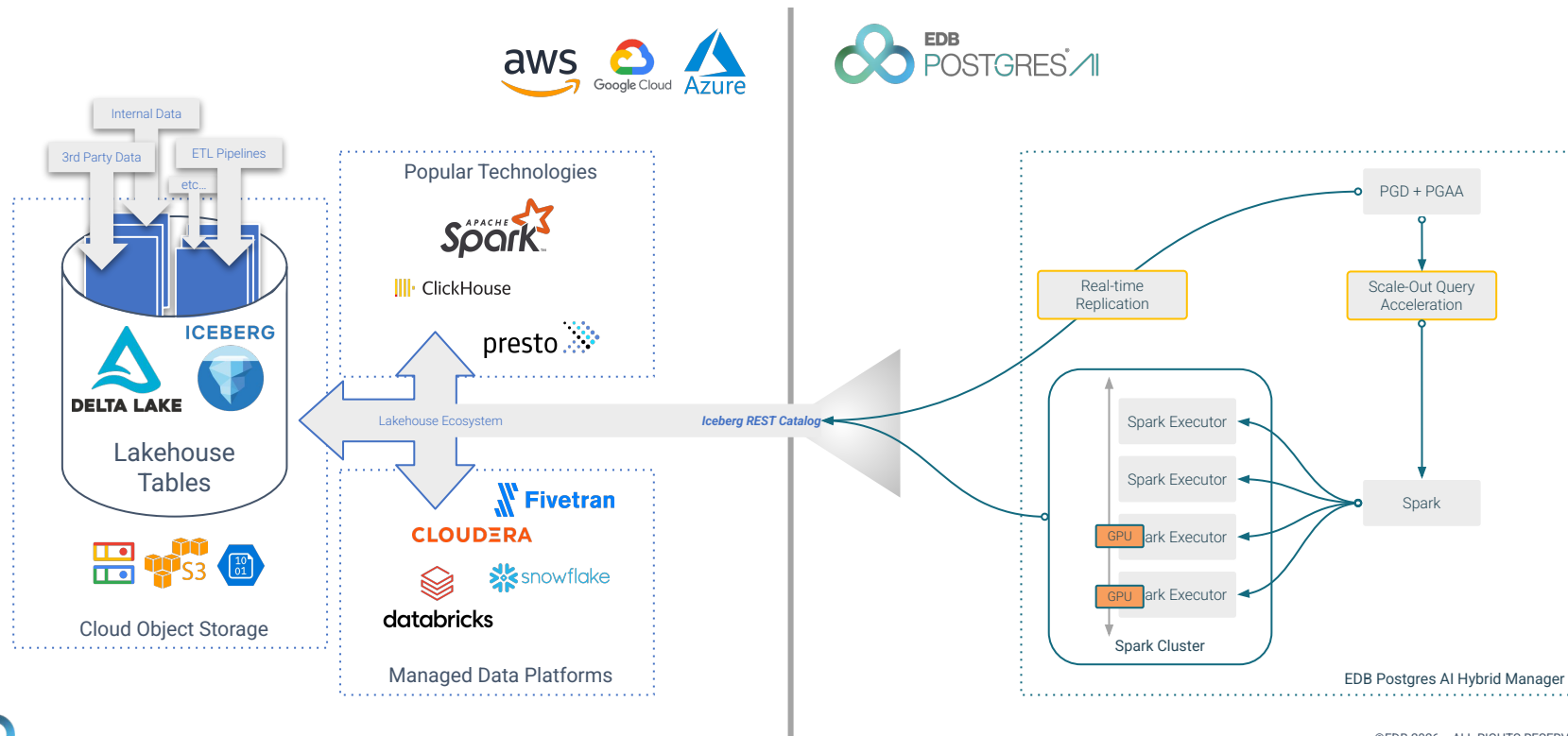
Converged Analytics

Integrate analytics directly with transactional data and implement tiered tables for zero ETL, TCO savings, & full sovereignty



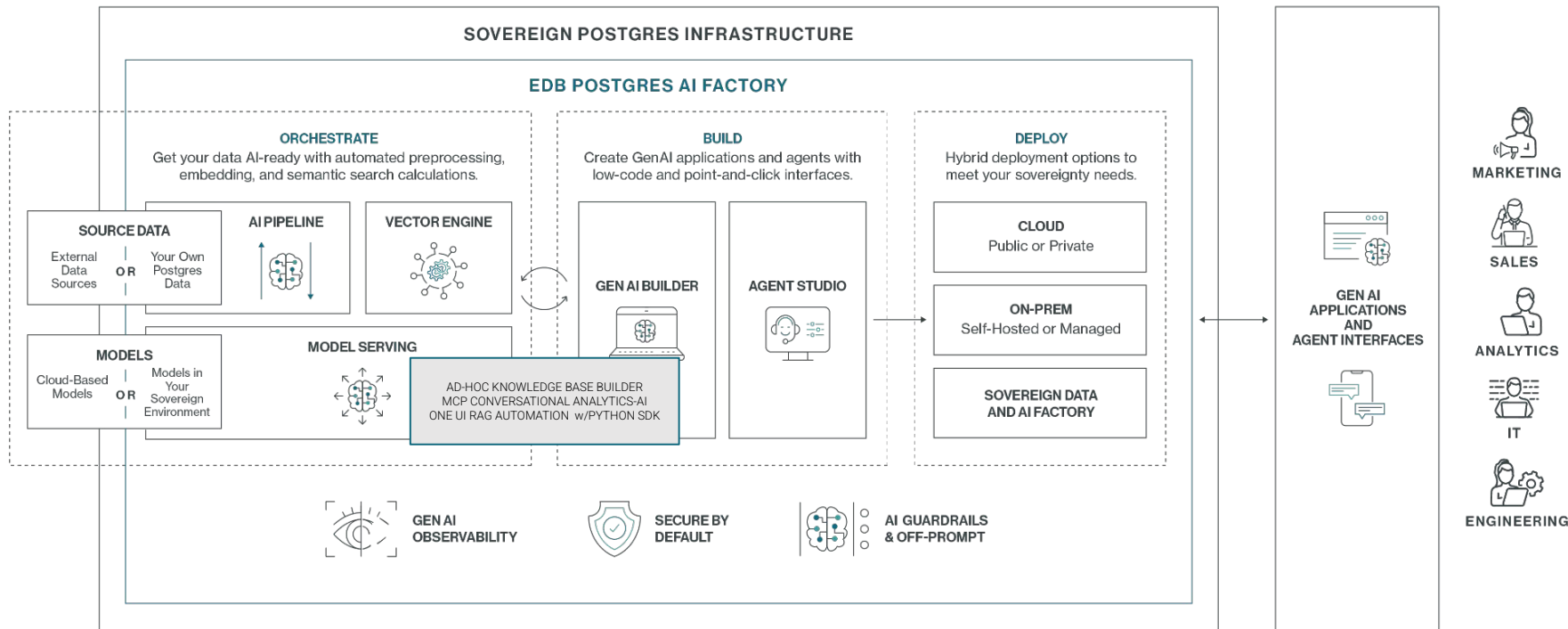
Partial Cloud Repatriation with EDB Postgres AI Analytics Engine

Lakehouse data is created, managed and shared in the Cloud – but queried on-premises, securely with predictable cost.

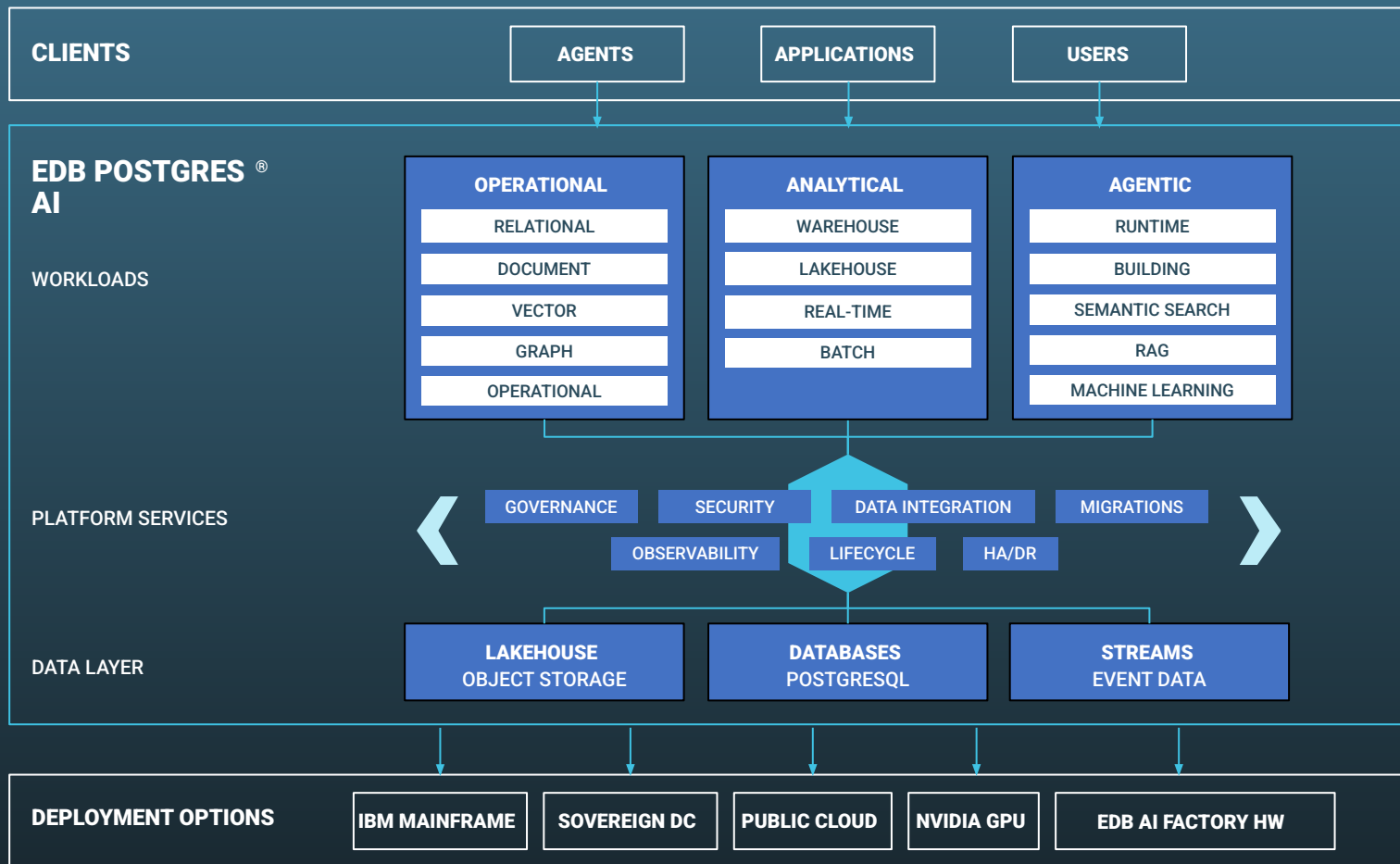


EDB Postgres Data Platform Integrates AI Factory

Build, test, and launch of sovereign AI applications within a unified platform



EDB Postgres AI - Unified Data Platform



Real EDB Customers, Real Analytics & AI Use Cases.

Global Payment Processor

Financial Services

Challenge: Batch ETL delays in loyalty systems — agents triggering offers days after customer engagement, missing the revenue moment entirely.
Outcome: EDB PGAI eliminates ETL batch silos. Transactions flow to analytics in near-real time. Agentic AI triggers hyper-personalised merchant offers while the customer is still in-store — not weeks later.

Days → Milliseconds

Euronext FX

Global FX Trading · 30B+ trades/day

Challenge: Mission-critical trading platform across 4 global data centers. Zero tolerance for downtime or performance degradation during migration.

Outcome: Binary-compatible migration from Greenplum to EDB WarehousePG. 5 production clusters migrated globally with each cluster migration completed in under 2 hours.

< 2 hrs per cluster

Kyobo Book Centre

Retail · Largest book retailer, South Korea

Challenge: Snowflake consumption costs spiraling unpredictably. Data sovereignty concerns for Korean regulatory compliance.

Outcome: Migration to EDB WarehousePG with full data sovereignty on-prem. Runaway cloud costs eliminated with superior analytical performance and complete data control.

Snowflake → Sovereign

What to take back to your organization this week.

01 Days 1–30

Audit Your Data Foundation

- Map: where is your OLTP-to-OLAP latency today? Hours? Days?
- Identify: how many ETL pipelines are your agents waiting on?
- Test: Is your AI being fed fresh data, less than a second of delay? Can you answer data lineage questions for your top AI use case?
- Benchmark: current infrastructure TCO vs. open, unified alternative

02 Days 30–60

Design Governance Into the Architecture

- Define data sovereignty boundaries before the next AI project starts
- Establish AI lineage policy: what data, why, where — auditable by design
- Implement RBAC at the data layer
- Sector compliance regulations to architectural controls

03 Days 60–90

Build for the Agentic Era

- Identify one high-value autonomous agent use case with measurable outcomes
- Eliminate one batch ETL pipeline blocking real-time agent context
- Define agentic ROI metrics before deployment — not after launch
- Build cross-functional alignment: CDAO + Engineering + Business + Legal

The next 12–18 months

will be defined by one question:

Is your data foundation ready for agents that act 24/7 — or will you scale your mistakes at machine speed?

- 1 Data foundation quality is your AI ceiling — fix the latency, fix the governance, then scale.
- 2 Sovereignty by Design is not a constraint. In a regulated world, it is your competitive moat.
- 3 The dividing line will be between organizations that governed their AI foundation and those still cleaning up the blast radius.

Thank You