Google Cloud | SAP

Redefining enterprise AI with a unified data foundation

Moving from operational blindness to agentic AI with SAP and Google Cloud

Introduction

The “data pipeline” dilemma

Business leaders recognize that true AI innovation cannot thrive on a foundation of disconnected silos and manual data extraction. This fragmentation strips away essential business context, increases technical debt, and creates operational blindness. In the era of autonomous, agentic enterprise AI, systems must make intelligent decisions. Relying on stale or disjointed data is no longer just inefficient — it forces AI agents to operate blindly, introducing severe risk to core business operations.

Chapter 1

The zero-copy revolution

at zero cost

To build trustworthy AI and make agile decisions, leaders can no longer afford the risks, costs, and delays associated with traditional data pipelines. SAP BDC Connect for BigQuery, the bidirectional, zero-copy, zero-cost integration between SAP Business Data Cloud (BDC) and Google Cloud BigQuery, allows organizations to instantly unify their data footprint without the complexity or security risks of moving or duplicating massive datasets.

Preserving business semantics

Maintain valuable semantic meaning, custom fields, and original hierarchies directly from SAP. This ensures enterprise data remains business-ready and accurately structured for downstream AI models without manual re-mapping.

The Cortex Framework intelligence engine

Automatically translate raw data structures into clear, context-rich data products ready for AI. By using Cortex Framework purpose-built BigQuery-based data products, integrated with Knowledge Catalog, organizations establish a trusted semantic layer with end-to-end data traceability.

Accelerated data velocity

Simplify data model deployment and pipeline orchestration using a modular, BigQuery with Dataform-centric approach. High-performance incremental delta loading delivers real-time updates to your AI applications while keeping cloud compute costs controlled.

Chapter 2

Modernizing the core with RISE with SAP

In a landscape where agility is paramount, building advanced AI capabilities on inflexible legacy systems introduces unacceptable operational risk. By deploying RISE with SAP on Google Cloud, businesses eliminate technical debt while ensuring enterprise data streams are supported by a secure, continuous, and AI-ready architecture.

Continuous data scalability

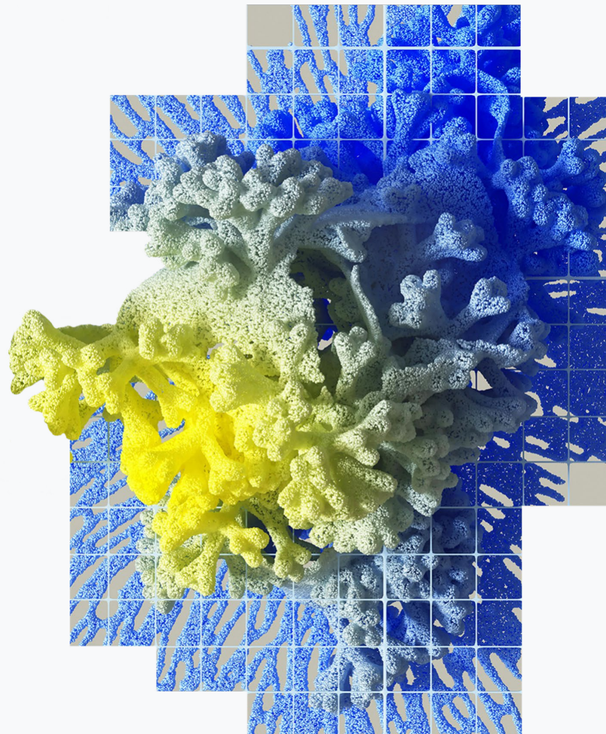
Maintain uninterrupted data streams for real-time AI agents through “Live Migration” technology, which keeps virtual machines and data pipelines running seamlessly during infrastructure maintenance.

Secure and sovereign AI

Scale AI and data operations across more than 40 global data centers to meet strict data residency requirements, while protecting sensitive SAP assets with a multilayered security foundation backed by Mandiant threat intelligence.

Sustainable AI scaling

Meet corporate ESG targets by processing heavy AI workloads on cloud infrastructure that is twice as energy-efficient as typical enterprise facilities.



Chapter 3

Driving business truth with agentic AI use cases

Finance

Accelerate inbound revenue, defend outbound spend, and optimally position working capital.

Agentic cash collection (Money in)

Accelerate inbound revenue by replacing blind, automated dunning with intelligent, context-aware outreach. By combining core financial data with dynamic customer context, agentic workflows can speed up cash recovery while protecting the client experience.

Agentic invoice validation (Money out)

Defend outbound spend by eliminating manual accounts payable bottlenecks and billing errors. By cross-referencing incoming invoices against internal purchase orders, negotiated contract terms, and real-world events, an agentic workflow acts as a digital gatekeeper, instantly automating validation.

Agentic cash deployment (Money maximized)

Optimally position working capital to maximize yield on surplus liquidity without increasing operational risk. By evaluating live market data across counterparties, tenors, and instruments, an agentic treasury workflow streamlines the deployment of excess corporate cash into short-term investments.

Supply Chain

Secure suppliers, anticipate demand, and navigate global uncertainty.

Agentic supplier risk management (Source)

Secure suppliers and prevent production downtime by proactively managing third-party risk. By cross-referencing vendor financial health with live geopolitical and weather disruptions, an agentic workflow adjusts sourcing schedules to ensure continuity.

Agentic inventory replenishment (Stock)

Anticipate demand and prevent stockouts on rapidly trending products. By evaluating live consumer market signals against internal inventory levels, an agentic workflow acts as a predictive procurement assistant, triggering purchase orders before a demand surge hits.

Agentic logistics optimization (Ship)

Navigate global uncertainty and maintain customer commitments when the unexpected happens. By continuously monitoring live transit data and physical-world bottlenecks, an agentic workflow acts as a dynamic freight coordinator, rerouting shipments in transit to protect delivery SLAs.

Utilizing BigQuery and Gemini Enterprise Agent Platform, leaders can deploy intelligent agents that reason over harmonized SAP and enterprise data to reliably automate complex, cross-functional processes.

Retail and Consumer Packaged Goods Industry

imize factory output, dynamically steer consumer demand,
and continuously optimize marketing ROI.

Agentic production scheduling (Make)

Maximize factory output by eliminating idle time and batch spoilage. By cross-referencing SAP production orders with real-world material availability and live machine IoT data, an agentic workflow acts as a dynamic shop-floor planner, optimizing manufacturing schedules.

Agentic demand shaping (Market)

Dynamically steer consumer demand to clear surplus inventory before it requires costly markdowns. By matching live ERP inventory levels with digital advertising channels, an agentic workflow acts as a proactive retail marketer, instantly launching targeted promotions to clear excess stock.

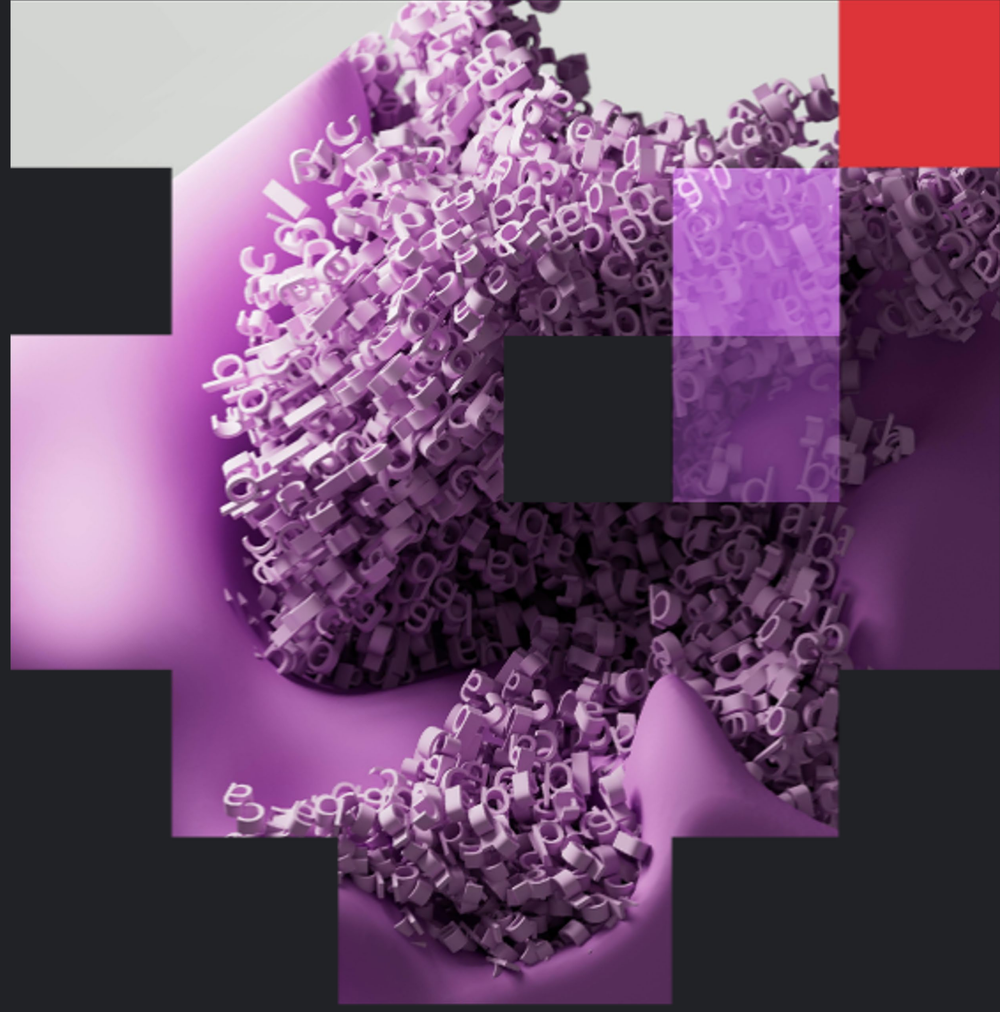
Agentic media-to-sales optimization (Measure)

Continuously optimize marketing ROI to ensure digital ad spend translates into sales. By linking live digital marketing signals directly to ERP-managed wholesale and retail transactions, an agentic workflow acts as a dynamic media planner, reallocating ad spend to maximize actual revenue.

Conclusion

Future-proofing your operations

The SAP and Google Cloud partnership provides the essential blueprint required to accelerate the agentic enterprise. By securely bridging mission-critical SAP data with Google Cloud's advanced AI ecosystem, organizations can eliminate operational blindness and drive autonomous business execution.



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