

Our STAR team



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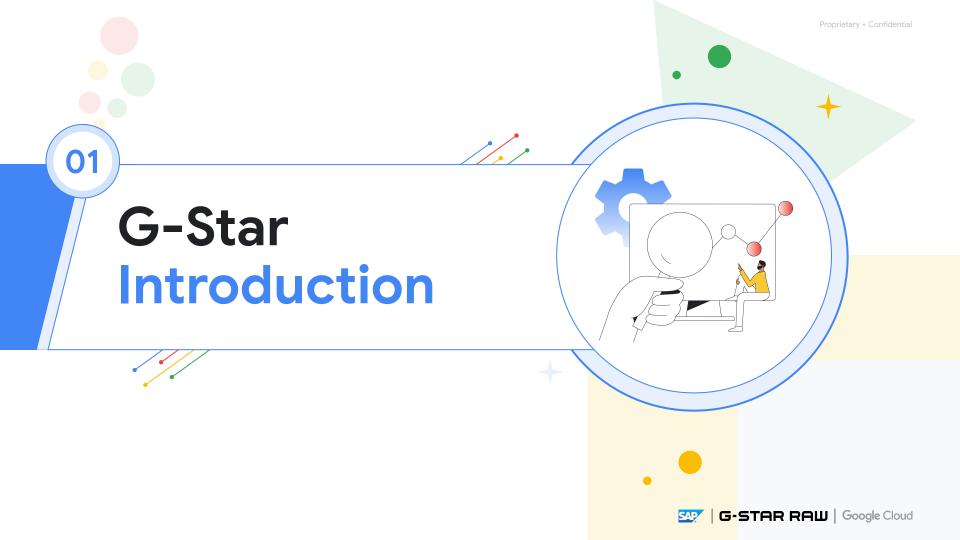


Agenda

G-Star introduction

Why Google Cloud

How do we process SAP data





G-Star Introduction and analytics journey



- Denim. It's our passion. It's in our blood. But we are not just another denim brand. Since 1989, we have been pushing the boundaries of denim design, manifesting our own future of denim.
- Has over 6000 selling points in 75 countries, and over 250 G-Star stores.





Replacing the custom made ERP with an enterprise grade solution. This allows for further grows and brick store expansion

SAP ECC

2012

THEOBALD SOFTWARE

Full redesign and rebuild of the corporate data warehouse. SAP centric data models.

On-prem Data Warehouse 2.0

Integration of the data with SAP Data Intelligence

With Cortex frameworks for logical models

SAP Data Intelligence + Cortex framework











2013 On-prem Data Warehouse

Successful integration of SAP data into on - premise SQL Server data warehouse. Provides close operational and strategic reporting.







Google BigQuery

Adoption of GCP services. Leverage BigQuery and Google Analytics insights for managing digital market.









Why Google Cloud for G-Star Data Platform



• **Flexibility and Scalability**: GCP, particularly BigQuery, offered a flexible and scalable solution that could ingest large volumes of data in real time, essential for adapting strategies quickly.



• Integration of Diverse Data Sources: The modern infrastructure enabled the integration of various data sources, including social media and Google Analytics, which were previously inaccessible with their old SQL-based system.



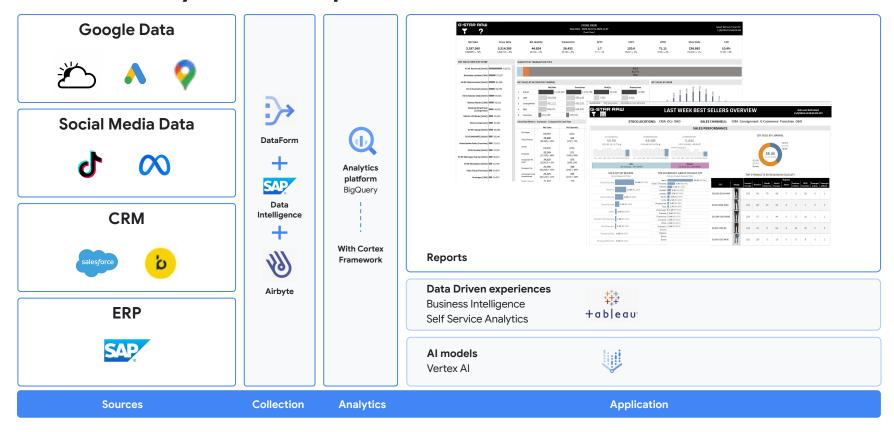
• **Enhanced Customer Insights**: The transition to GCP allowed G-Star RAW to gain deeper insights into customer behavior and marketing effectiveness, essential for optimizing their online sales strategy.



 Accelerated Implementation with Managed Services: The use of GCP's managed services, such as Cloud Composer and Google Cloud Functions, facilitated a faster implementation process, allowing G-Star RAW to focus on critical analyses to improve their business strategy.



Current Analytic landscape at G-Star



Google Cloud Data Platform

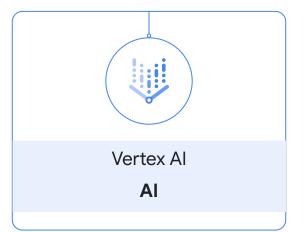
Google is built from ground up to optimize data and Al workflows across organizations

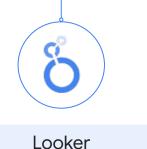
Gemini on Google Cloud



BigQuery

Data





Insights

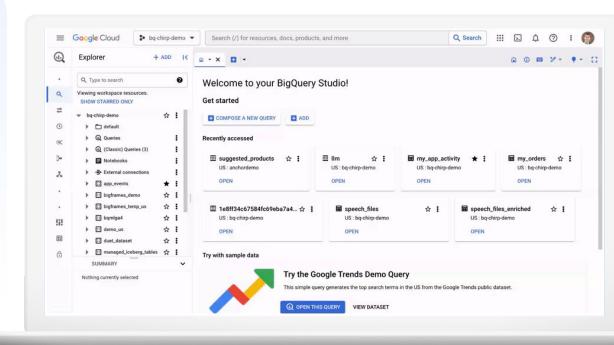
Google Cloud Infrastructure (GPU / TPU / Silicon)

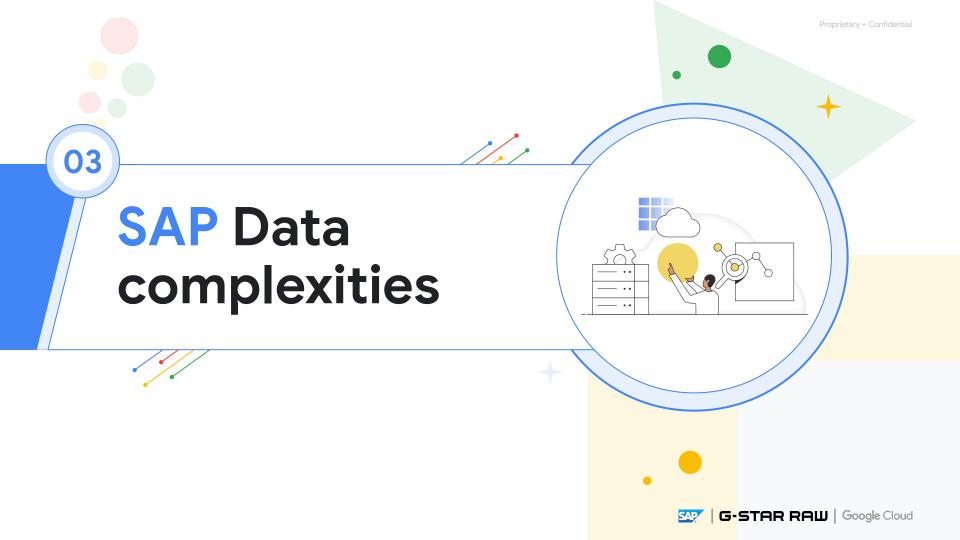
Built for Al from ground up

BigQuery is the single entry point for all data teams

A collaborative data workspace for all data practitioners to accelerate data to Al workflows

- Single unified workspace including a SQL and notebook interface for all data users
- Use SQL, Python, Spark, Javascript and natural language for analytics regardless of data scale, format and location
- BigQuery DataFrames: Familiar Pandas interface to prepare, train on and score data at PB scale
- Centralized source control and revision history: improved collaboration by extending software development best practices to data and code with Dataform
- Automated data profiling, quality and lineage across all data assets
- Maximize productivity by collaborating with an Al-powered chat and code assistant





G-Star SAP Data Challenges

Integrating SAP ECC data with BigQuery presented several pitfalls

Complex Data Structures

SAP ECC often contains complex data structures and relationships that can complicate extraction and integration processes.

Data Quality Issues

Ensuring data quality during the transfer is crucial; discrepancies or errors in SAP data can lead to inaccurate analyses in BigQuery.

Lack of Predefined Connectors

Limited availability of ready-to-use connectors or integration tools specifically designed for SAP ECC and BigQuery can prolong the integration process.

Complex multi two stage extraction

Most of the available tools enable data replication between SLT and Google Cloud Storage (flat file replication). This requires additional step to ingest the data BigQuery for any analytical use cases

Typical Challenges with SAP Data Extraction



Not obvious



Very Difficult



Structured Data in SAP
Application

Raw SAP data in external
Data lake or data
warehouse

Data Modeling for Smart Analytics and Al



Cortex Framework | Out-of-the-box Reporting

with sample Looker BI dashboards

Why Cortex?

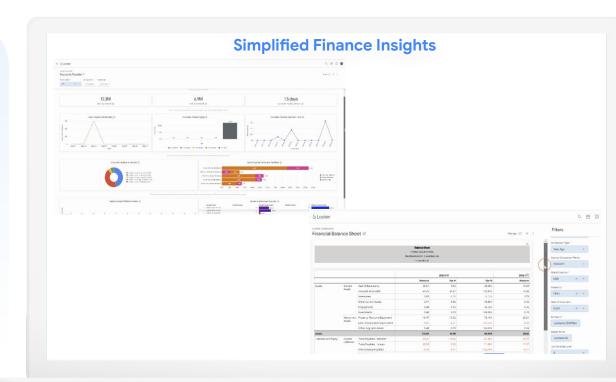
Highlights

- Sample Looker insights
- Ready-to-deploy from Github
- Visualize financial metrics / KPIs
- Aggregated financial statements

Benefits

- Customizable by design
- Extend and enhance with your own KPIs
- Replace with any other visualization tool
- Faster time to implement / value

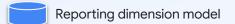
See GitHub for SAP for ready-to-deploy content



Cortex Predefined Data Models for SAP Financial Statements

We address the complexity so you can deliver Al insights faster





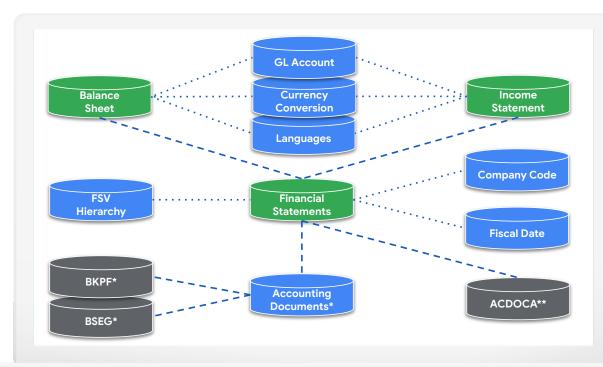


SQL join (inner/outer)

- - - SQL select or materialized view

* SAP ECC only

** SAP S/4HANA only



Predefined & Customizable BigQuery Data Models

Supporting a variety of data sources

















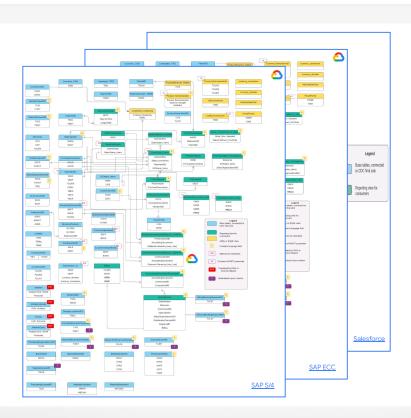








Extend or enhance our models or build your own!



Example: Industry-standard KPIs available in Cortex Data Foundation models



Marketing

Keyword Performance Impression Share & CTR Keyword Performance on Cost Keyword Performance on Conversion Audience Engagement Report Audience Conversion Report Audience Engagement Cost Performance Site level efficiency report Site level effectiveness report



Sales & Distribution

One Touch Order (%) In-full Delivery (%) On-time Delivery (%) Order Cycle Time Back-order rate (%) Average Fill Rate Delivered Net Price Delivered Net Value Late Deliveries Delivery Blocked Order Actual Billed Quantity Overdue Receivables Days Sales Outstanding Doubtful Receivables



Supply Chain

Stock On-hand Quantity Inventory Turn Stock by Category Slow-moving Inventory Obsolete Inventory Inventory Days of Supply Inventory Value On-hand Inventory Replenishment Time Inventory Safety Stock Inventor Reorder Point Vendor On-time Delivery (%) Vendor Rejection Rate (%) Vendor Lead Time Vendor Invoice Accuracy (%) Purchase Price Variance Overdue Purchase Orders



Manufacturing

Production Availability (%) Asset Efficiency (%) Production Quality (%) Overall Equipment Effectiveness Operational Anomalies Machine Sensor / IOT Signals



Sustainability

ESG Ranking Score GHG Emission Score Average Industry Peer ESG Ranking Score Natural Resource Management Scores Environmental Risk & Opportunities Scores Products Quality Management Scores **Business Resiliency Scores**



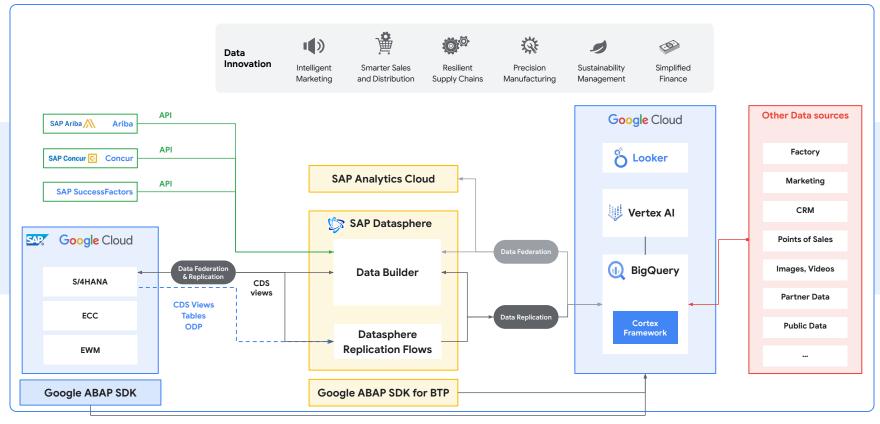


Finance

Net Income

Gross Revenue Net Revenue Cost of Goods Sold (COGS) Operating Expenses Gross Profit Margin Current Ratio Current & Noncurrent Assets Current & Noncurrent Liabilities Shareholder's Equity Days Payable Outstanding Accounts Pavable Aging Accounts Pavable Turnover Cash Discount Utilization Upcoming Payments Upcoming Penalties Parked Invoices **Blocked Invoices** Vendor Open Debit Items Vendor Returns Vendor Spend

How does Datasphere connects with BigQuery



Questions?

Better Together





