

From Governed Data and AI to **Trusted Enterprise Decisions**

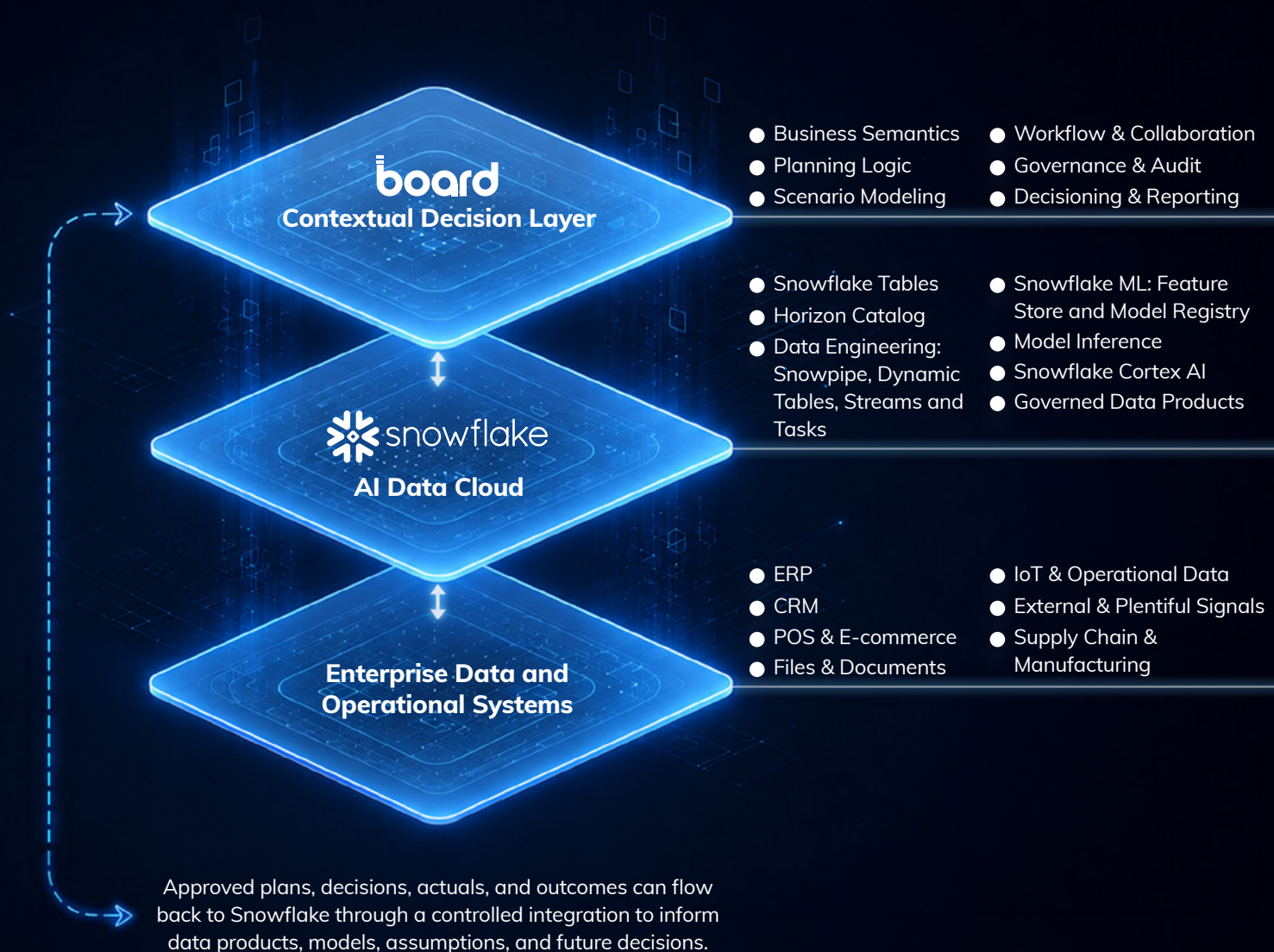
A reference architecture for connecting Snowflake's AI Data Cloud
with Board's Contextual Decision Layer



board

Snowflake provides a governed platform for data engineering, analytics, machine learning, and AI.

Board adds the business context, planning logic, scenarios, workflows, and decision governance required to turn governed data and AI outputs into coordinated action.

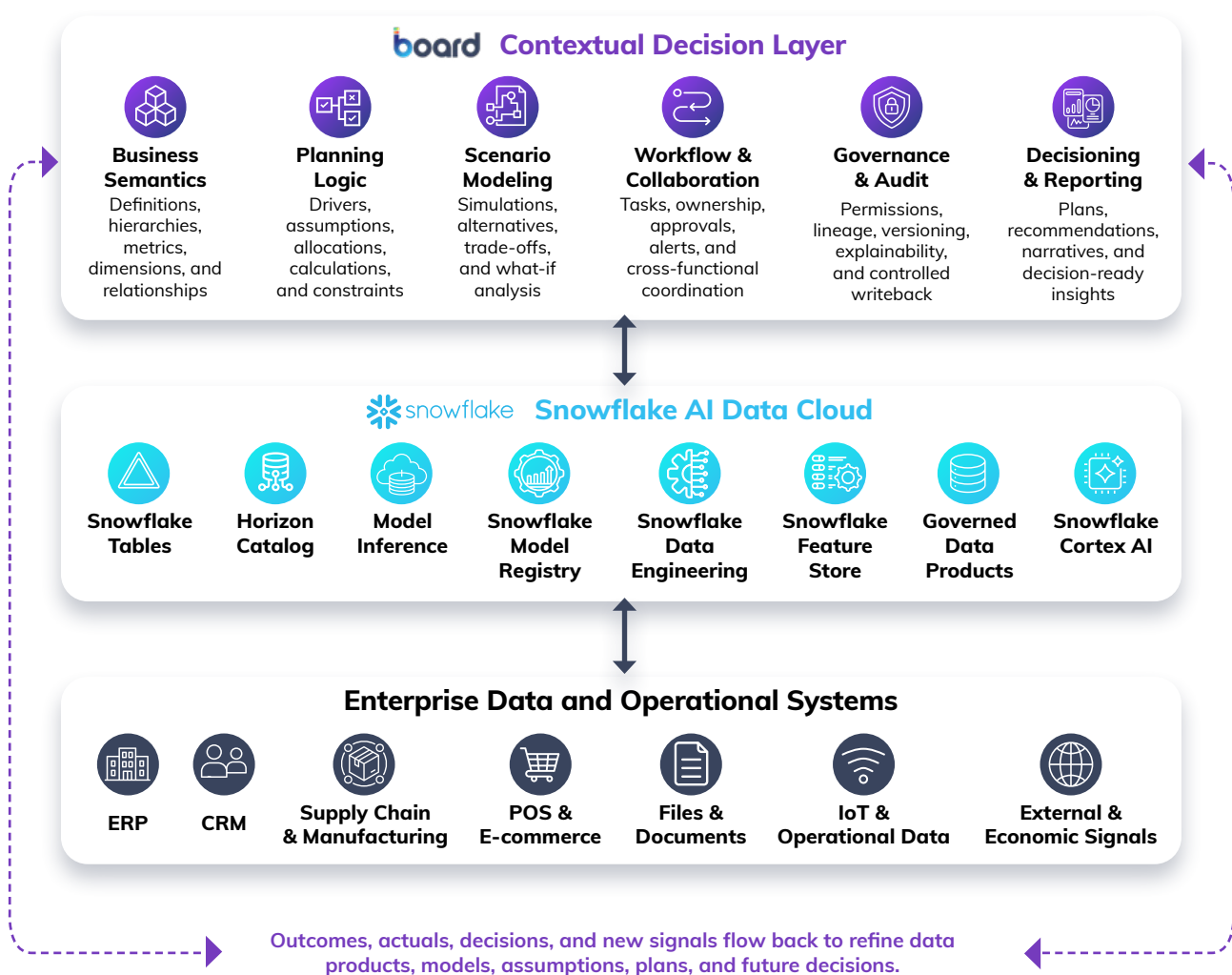


How Board and Snowflake close the gap between enterprise intelligence and coordinated business action.

Enterprises have invested heavily in modern data platforms, governed data products, machine learning, and generative AI. Yet trusted data and intelligent models do not, by themselves, produce trusted business decisions.

Enterprise decisions also depend on planning assumptions, business rules, financial logic, scenarios, ownership, approvals, operational constraints, and human judgment. These capabilities often remain distributed across spreadsheets, applications, and departmental processes.

Board and Snowflake address these complementary requirements.



Why this architecture matters



Governed Data and AI Platform

Snowflake provides governed data storage, data engineering, analytics, machine learning, and AI capabilities on the Snowflake AI Data Cloud.



Decision Context

Board adds the business semantics, assumptions, rules, workflows, and planning structures required to make intelligence actionable.



Continuous Planning

Plans and forecasts adapt as new internal results, model outputs, and external signals become available.



Governed Action

Recommendations and decisions move through permissions, approvals, audit controls, and human oversight before execution.

Architectural principle

Keep enterprise data and AI assets where they belong.
Keep planning logic and decision governance where they belong.
Connect them through secure, governed interfaces.

Snowflake Data Integration & AI Pipeline

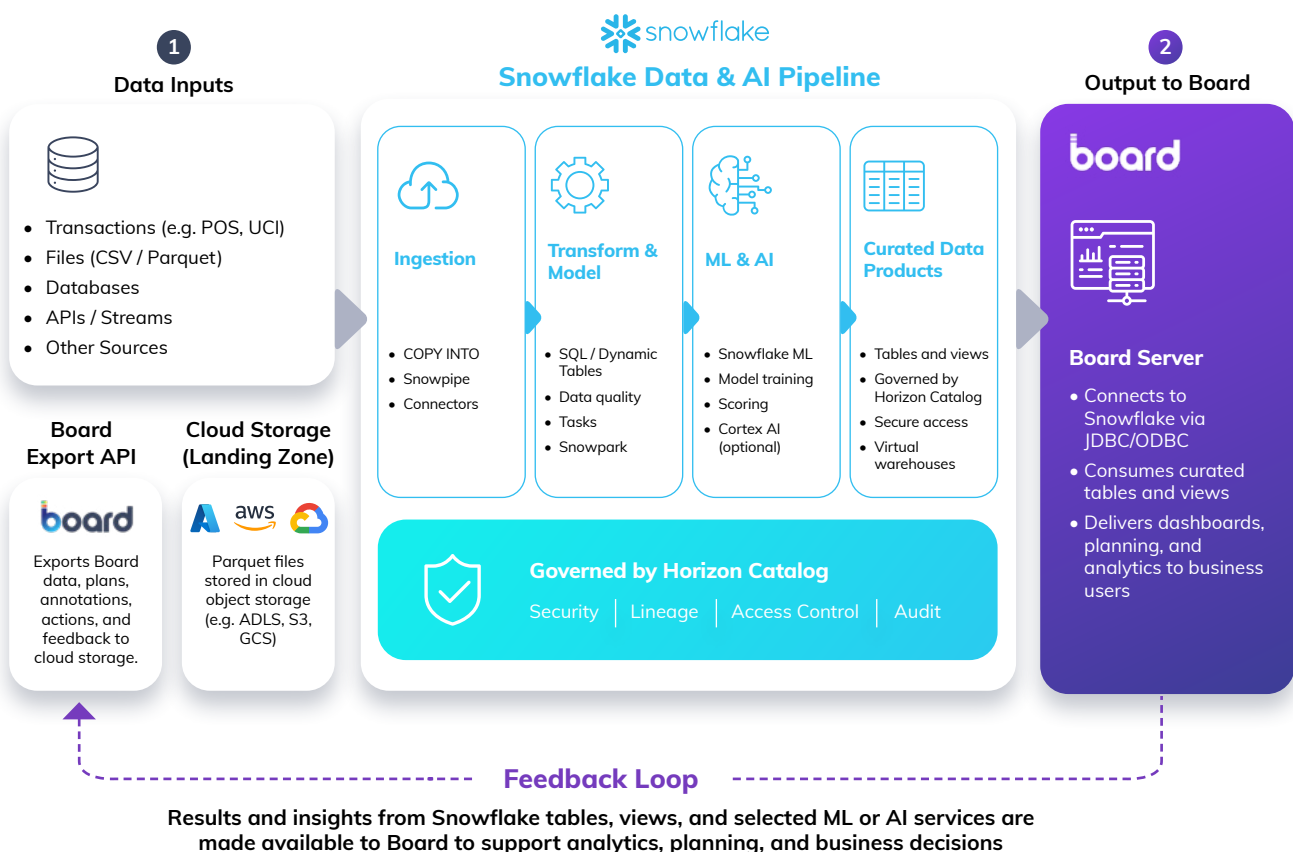
Most enterprises already have cloud storage, data pipelines, data engineering, and machine learning capabilities. Snowflake provides services for loading, transforming, governing, and analyzing data, and for applying machine learning and AI.

The challenge is operationalizing those assets inside planning and decision workflows.

This reference pattern shows how Snowflake ingests, transforms, and governs enterprise data and AI outputs, while Board activates those assets through planning models, business rules, scenarios, and workflows.

Together, Snowflake and Board create a governed flow from data and AI outputs to coordinated plans, approved actions, and measurable business outcomes.

Customer Segmentation Pipeline: Reference Architecture



Board Export API can export data to Parquet files in cloud object storage. Snowflake can load staged files using COPY INTO or Snowpipe. Snowflake transformations can use SQL, Dynamic Tables, or Streams and Tasks. Board can query Snowflake through JDBC or ODBC. Any writeback from Board to Snowflake requires a separately configured, approved integration.

Key Benefits



End-to-end cycle

From data to insights and back



Flexible data inputs

Internal sources or via Board Export API



Governed, secure, and scalable

With Horizon Catalog and Snowflake access controls.



Snowflake Data Engineering

For loading, transformation, analytics, and selected ML or AI workloads



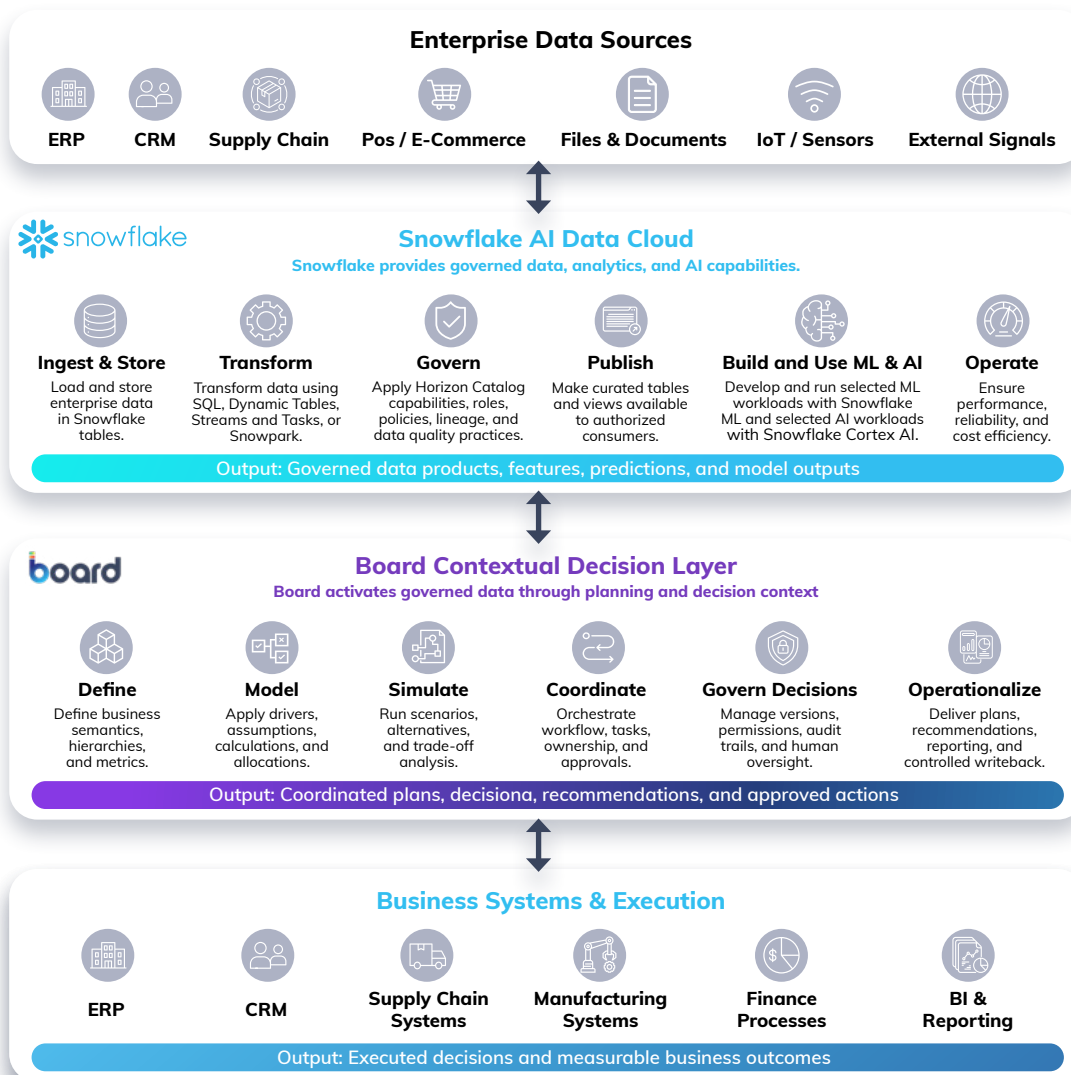
Actionable insights

Delivered to Board for business users

Architectural Responsibilities

Clear boundaries. Shared governance.
Coordinated outcomes.

Snowflake and Board have complementary responsibilities across the enterprise data-to-decision lifecycle. Clear boundaries ensure each platform delivers maximum value while working together to drive business outcomes.



Why clear boundaries matter

Use Snowflake for governed data engineering, analytics, and the Snowflake ML or Cortex AI capabilities selected for the solution.

Keep planning logic, scenarios, workflows, and decision governance in Board.

Connect them through secure, governed interfaces.

Shared Responsibilities

Security & Compliance

Protect data and meet enterprise policies.

Identity & Access

Align roles and permissions across platforms.

Governance Alignment

Maintain consistent ownership, lineage, and standards.

Operational Excellence

Monitor reliability, performance and support.

Business Outcomes

Measure the value of data-to-decision execution.



Snowflake Optimizes

Ingest - Store - Transform - Govern - Analyze



Board Optimizes

Activate - Enrich - Plan - Decide



Business Systems Optimize

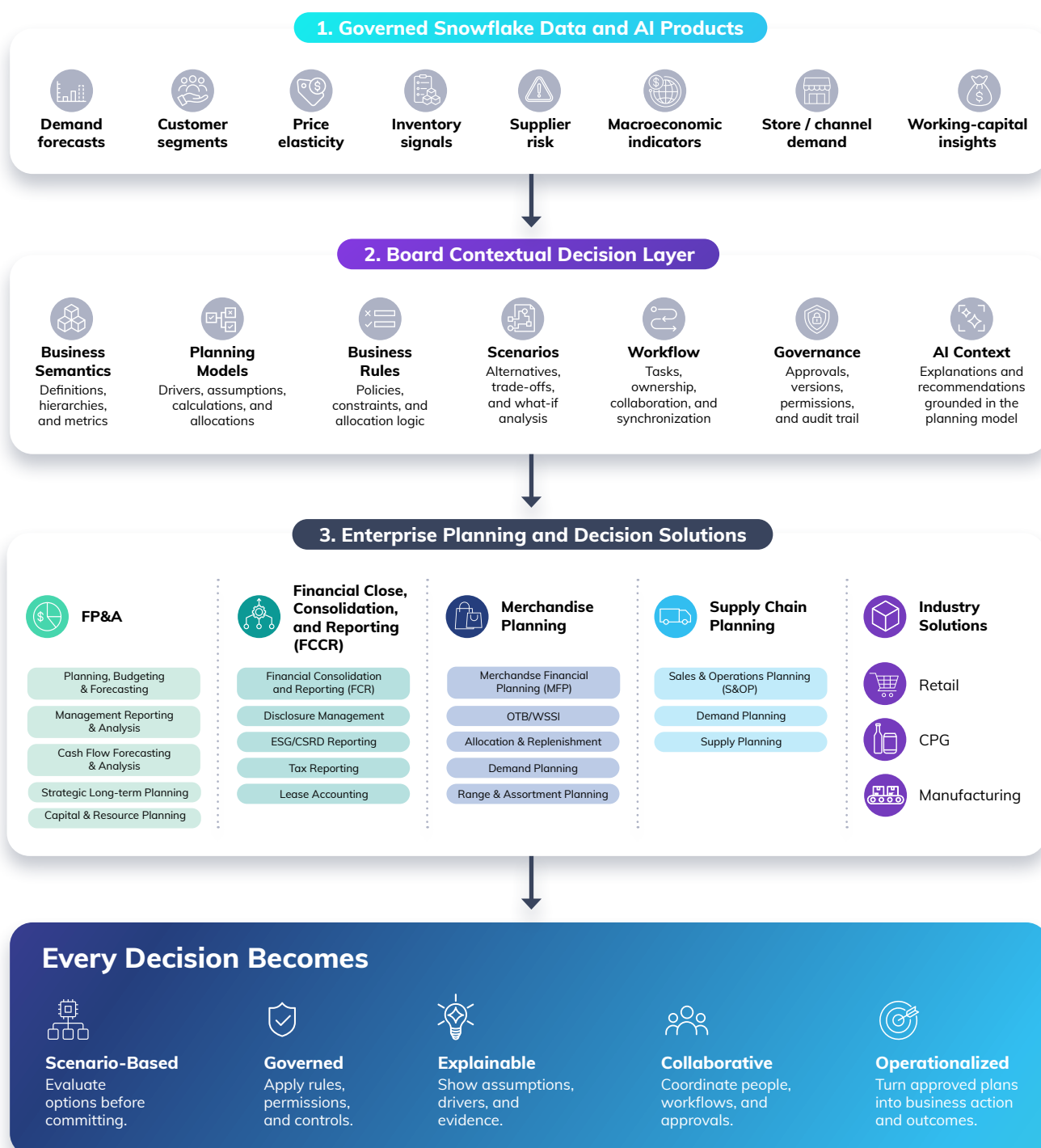
Execute - Measure - Operate - Improve

From Snowflake Data Products to Enterprise Decisions

How Board activates and enriches governed Snowflake data and AI products with planning context

Snowflake makes governed data products and selected AI or ML outputs available for consumption. Board adds the business context, planning logic, workflow, and governance required to transform those assets into coordinated plans, recommendations, and actions.

Together, Snowflake and Board turn governed data and AI outputs into measurable business outcomes.



Architecture Design Principles

Recommended practices for enterprise planning architectures built on Snowflake and Board.



Keep enterprise data in Snowflake.

Use Snowflake as the governed platform for enterprise data, analytics, and selected ML or AI workloads. Avoid unnecessary duplication of governed datasets.



Expose trusted data products—not raw data.

Planning should consume curated Snowflake tables and views with clear business definitions, quality expectations, lineage, and access controls.



Separate prediction from planning.

Use Snowflake ML or Cortex AI where appropriate to generate predictions or AI outputs. Use Board to plan, simulate, collaborate, and decide what the business should do next.



Keep planning logic deterministic.

Business rules, assumptions, allocations, approvals, scenarios, and workflows belong in the Contextual Decision Layer, not inside prompts or LLMs.



Close the loop.

Plans, decisions, annotations, and outcomes can flow back to Snowflake through a controlled integration to inform analytics, model performance, and future planning.



Build for openness.

Use supported interfaces such as JDBC, ODBC, REST APIs, and file-based exchange where appropriate. Confirm the selected interfaces and data formats for each implementation.

Recommended Reference Pattern



Enterprise Systems

Source systems generate operational transactions and signals.



Snowflake

Ingest, store, transform, govern, and analyze data; apply Snowflake ML or Cortex AI where selected.



Governed Data Products

Curated, trusted, reusable datasets and ML outputs for consumption.



Contextual Decision Layer

Activate and enrich data with context, logic, and governance to enable decisions.



Board Solutions

Plan, simulate, collaborate, and approve across functions.



Business Execution

Execute plans and actions in operational systems.



Results

Outcomes, performance, and feedback are captured.



Approved outcomes and feedback can inform data products, models, and future decisions through controlled integrations.

Part of the Board + Data Platform Series

Board complements leading data platforms by activating and enriching governed data with planning context, business rules, workflow, and decision intelligence.

Previous Guide



Board + Databricks

Activate & Enrich Enterprise Data with Continuous Planning.



Previous Guide



Board + Microsoft Fabric

Activate & Enrich Enterprise Data with Continuous Planning.



Current Guide



Board + Snowflake

Activate & Enrich Enterprise Data with Continuous Planning.



Learn more at
www.board.com