Listing Description – Business and Technical Overview (Snowflake Marketplace)

Product Overview

The Financial GL Automation Accelerator is a Snowflake Native App that enables automated, governed transformation of General Ledger (GL) data using a medallion ELT architecture (Bronze → Silver → Gold).

The solution operates entirely within Snowflake compute and storage, allowing finance and data engineering teams to standardize, enrich, incrementally process and publish analytics-ready financial datasets without requiring extensive manual SQL development.

It combines AI-assisted metadata enrichment, rule-based transformation pattern generation, dbt model materialization and human-in-the-loop approval to ensure technical reliability and financial governance.

Key Capabilities & Workflow

- **Automated Metadata Enrichment:** The first step enriches table and column metadata using an embedded AI agent to capture business terms, data types, descriptions, and relationships — improving data understanding and governance upstream in the pipeline.

- **Silver/L1 Standardization:** The Silver (L1) agent analyzes raw source tables and generates *standardized, canonical views* on Snowflake datasets, enforcing consistency across domains.

- **Silver/L2 Incremental Design:** The Silver (L2) agent proposes incremental models using suggested unique keys, incremental keys, non-null constraints, delete flags, and other heuristics. Engineers review and approve patterns before deployment.

- **Gold/L3 Business-Ready Tables:** The Gold agent builds business logic-centric tables optimized for reporting and analytics based on requirements defined via the UI, ready for BI tools like Tableau, Looker, and others.

- **Human-In-The-Loop Guidance:** At each stage, AI augments developers' productivity but keeps human review as the final authority — ensuring correctness, domain relevance, and governance compliance.

Technical Architecture & Integration

- **Snowflake-Native Execution:** All compute and storage use Snowflake warehouses and databases; no external data movement is required.

- **dbt Integration:** Transformation logic generated by agents is materialized as dbt models. These are versioned in a GitHub-backed dbt project and executed inside Snowflake, giving users full lineage, version control, and collaboration support.

- **Self-Healing & Governance:** The platform embeds checks and balances to detect drift, data anomalies, and schema changes, enabling automated healing actions wherever appropriate.

- **Seamless Installation & Use:** Delivered as a Snowflake Native App with built-in Streamlit UI, consumers can install and operate the solution directly within their Snowflake account with minimal setup.

Benefits to Users

- **Accelerates Data Engineering Workflows:** Reduce development time from weeks to hours with guided pipeline generation.

- **Improves Pipeline Quality & Reliability:** Automated metadata, best practice standards, and governance ensure consistent high quality.

- **No Code Required:** Business users and analysts can participate in pipeline definition, minimizing dependence on specialized SQL/Python coding skills.

- **Enterprise Ready:** Built-in governance, auditability, self healing, and human confirmation loops enhance control and compliance.

Typical Usage Scenarios

- Enterprise teams modernizing legacy ETL towards cloud-native ELT in Snowflake.

- Organizations seeking to operationalize medallion architectures with AI-augmented engineering.

- BI teams needing robust, business-trusted gold models on ad hoc basis for reporting and dashboards.

How It Is Used :

Configuration steps for the consumers:

After installing the app, the consumer will need to:

1. Create a network rule with the required endpoints.

2. Create an External Access Integration using that network rule.

3. Bind the EAI to your app's reference (this can be done through Snowsight during app configuration)

After configuring the above steps, the consumer launches the embedded Streamlit interface directly within their Snowflake account.

Functional Steps on the Application UI:

Step 1 – Source Registration

The data engineer selects raw source tables (Bronze layer) already available in Snowflake. The app scans table schemas and profiles metadata.

Step 2 – Metadata Enrichment

An AI agent analyzes table and column structures and proposes enriched metadata including:

- Table descriptions
- Column descriptions
- Business-friendly naming

The engineer reviews, edits (if needed), and approves the metadata updates before this is fed to the Silver Agents.

Step 3 – Silver Layer (L1) Standardization

The Silver/L1 agent generates standardized views over raw data:

- Applies naming conventions
- Cleans and aligns data types
- Creates consistent canonical schemas

The engineer reviews and approves the generated logic before deployment.

Step 4 – Silver Layer (L2) Incremental Modeling

The L2 agent proposes incremental transformation models with:

- Suggested unique keys
- Incremental load keys
- Non-null enforcement
- Soft delete handling
- Change tracking logic

The engineer acts as a human-in-the-loop validator, approving or modifying the logic prior to materialization.

Step 5 – Gold Layer (L3) Business Models

Users provide business requirements in natural language (e.g., “Create a monthly GL balance model by entity, account, and cost center with YTD calculations”).
The Gold agent generates optimized transformation logic to produce GL balance, Trial Balance, and financial reporting tables that are analytics-ready and consumable directly by BI tools such as Tableau, Looker, and Power BI.

Step 6 – Execution & Version Control

All transformation logic is:

- Materialized as dbt models
- Version-controlled via GitHub
- Executed inside Snowflake warehouses

Once approved, models are deployed and become production tables within the consumer’s Snowflake environment.

The Financial GL Automation Accelerator provides a structured, Snowflake-native framework for modernizing General Ledger data pipelines using governed, AI-assisted ELT automation. By combining medallion architecture, dbt-based transformation logic, and human-in-the-loop validation, the solution enables finance and data teams to deliver standardized, audit-ready financial datasets with reduced development effort and improved operational control.

Built entirely within Snowflake, the application ensures secure execution, full lineage visibility, and scalable processing across enterprise environments. The result is a reusable financial data foundation that accelerates reporting, strengthens governance, and supports confident business decision-making.

For any questions, implementation guidance, or clarification regarding this listing, please contact **Dataplatr**. Our team will be happy to assist with onboarding, architecture discussions, and use case alignment.