



Real-Time Price Prediction at Scale with Snowflake and Superset





What Makes a Diamond Valuable?



From Source to Story: Workflow Overview



Data Storage & Pipeline



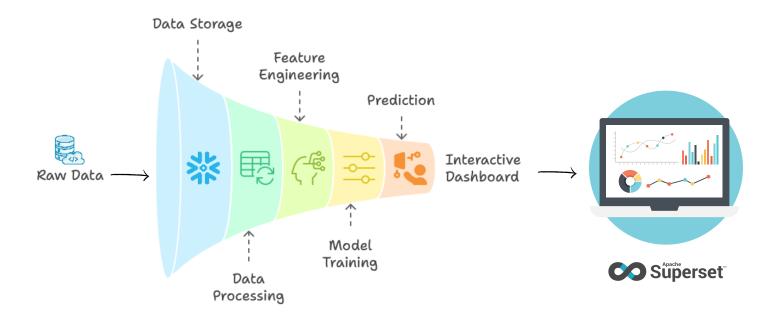
Interactive Dashboard

Why Snowflake?

Raw Data File

Features	Traditional Platforms (i.e Databricks)	\$	SnowFlake
Dashboard Integration	Requires extra configuration, APIs, or exporting	*****	Interactive Dashboard supported
Python UDF Deployment	Requires APIs or external endpoints	****	ML models as UDFs with SQL
Unstructured Processing	Handles complex transformations	***	Limitations for unstructured data
Secure, Governed Insights	External tools needed for fine- grained access control		Built-in, enterprise-grade security with native RBAC

Snowflake-Powered Data Pipeline



Business Use-Case



Financial Services

Handles massive volumes of transactions, needs real-time risk analytics, fraud detection, and regulatory compliance.



Healthcare

Manages sensitive patient data, genomics, and clinical trial data with strict privacy regulations (e.g., HIPAA).



Retail & E-commerce

Requires **fast**, **granular insights** on customer behavior, inventory, supply chains, and omnichannel performance.



Media & Entertainment

Needs **unified analytics** from streaming behavior, ad performance, and subscriber engagement.



Technology & SaaS

SaaS platforms need **scalable infrastructure** for customer usage data, product telemetry, and embedded analytics.

Meet Our Team! Group 8



Charlotte Wang



Divyansh Sen



Harman Singh



Olivia Boe



Swapnil Sharma



