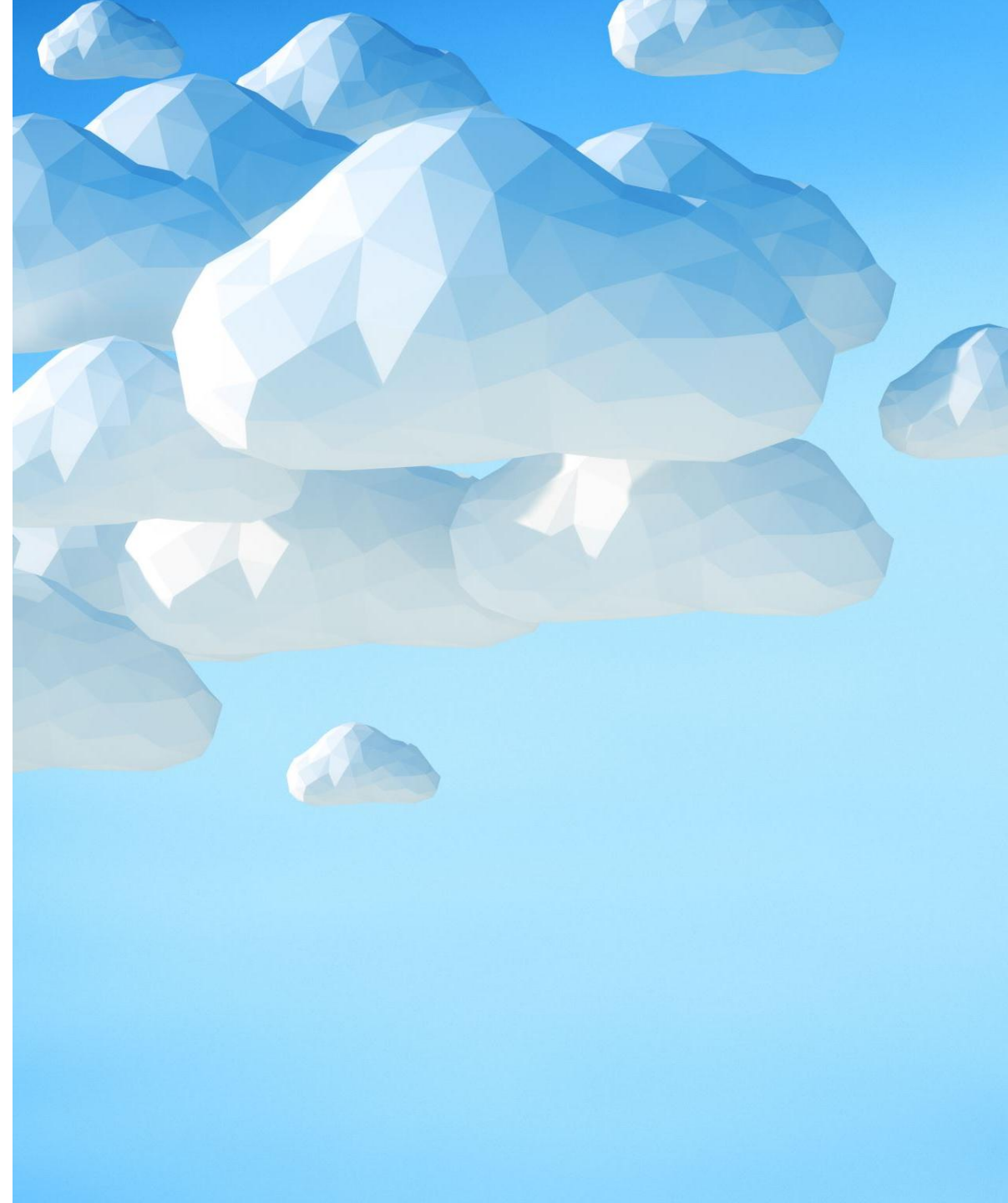# SOFA SO GOOD CLOUD ARCHITECTURE
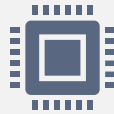
Emmanuel Falonipe

INTRODUCTION: UNLOCKING THE POWER OF SOFA-SO-GOOD'S DATA

In today's dynamic business environment, data is a critical asset for Sofa-so-good.

The increasing volume and variety of data necessitate a modern, scalable solution.

This project addresses the need to overcome data silos and gain a unified view of business operations.

Our goal is to build a robust and scalable cloud-based data infrastructure for easy data access and informed decision-making.
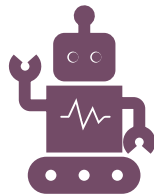
PROJECT OBJECTIVE AND PURPOSE

OBJECTIVE: TO BUILD A ROBUST AND SCALABLE DATA INFRASTRUCTURE THAT ENABLES SOFA-SO-GOOD TO GAIN EASY ACCESS TO BUSINESS DATA.

PURPOSE

Centralize and integrate disparate data sources.

Automate data processing and transformation for efficiency.

Enable easy data retrieval for advanced analytics and reporting.

Provide a single source of truth for all business data.

MISSION

TO DESIGN AND IMPLEMENT A HIGH-PERFORMANCE, RELIABLE DATA ENGINEERING PIPELINE THAT ENSURES ACCURATE, READILY ACCESSIBLE, AND CONSISTENTLY AVAILABLE DATA, EMPOWERING SOFA-SO-GOOD WITH A FOUNDATIONAL INFRASTRUCTURE FOR FUTURE ANALYTICS AND OPERATIONAL IMPROVEMENTS.

GOALS

Centralize Data: Create a unified repository for easy access and informed decision-making.

Optimize Data Flow and Pipeline Efficiency: Improve data workflows by integrating real-time insights and automation for seamless processing and enhanced performance.

Future-Proof Data Pipelines: Build adaptable data engineering systems that prioritize cost-efficiency, optimization, and reliability.

DESIGN PHASE

- Which are our data sources?
  - Structured, Unstructured?
- How data will be used?
- Who will be using the data?

DATA INPUTS

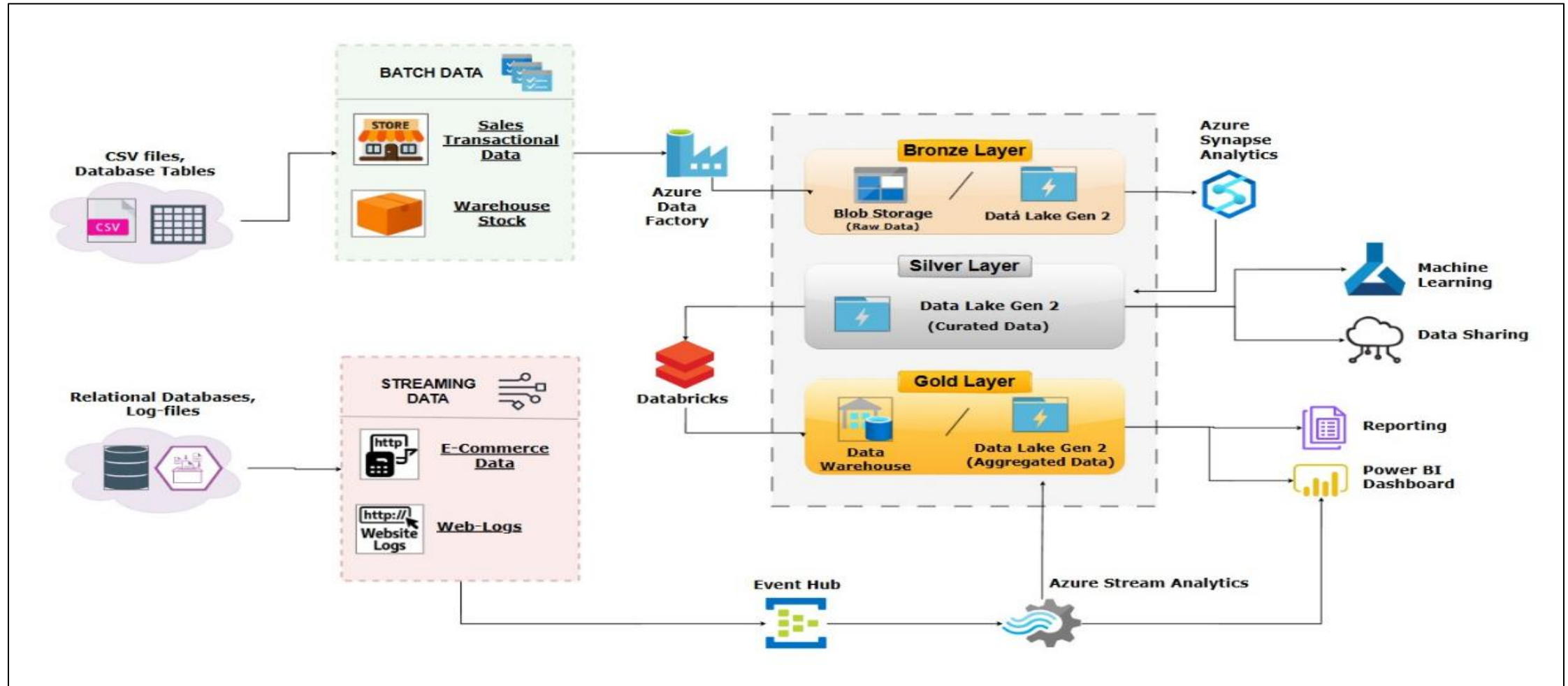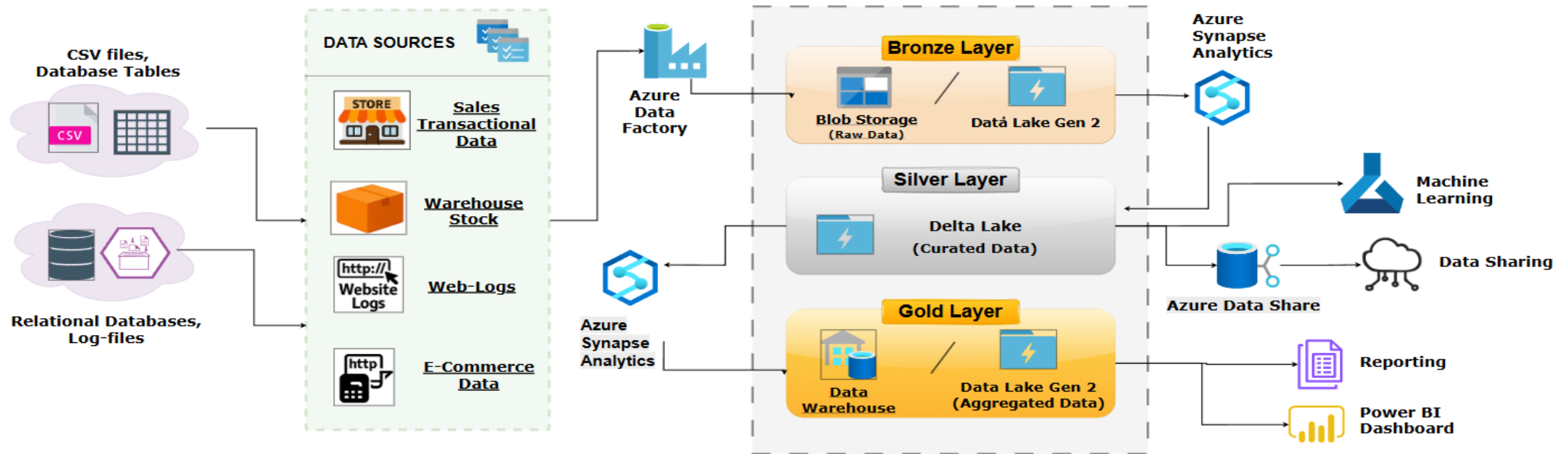|		
	Sales Transaction Data (Physical stores)	Type: Structured Ingestion: Batch
	E-Commerce Data	Type: Structured Ingestion: Batch
	Warehouse Operational Data	Type: Structured Ingestion: Batch
	Website Logs	Type: Unstructured Ingestion: Batch

DATA OUTPUTS/DELIVERABLES

- Sales Performance Dashboards

- Inventory Management Reports

- Customer Segmentation Reports

- Sales Forecasting Reports
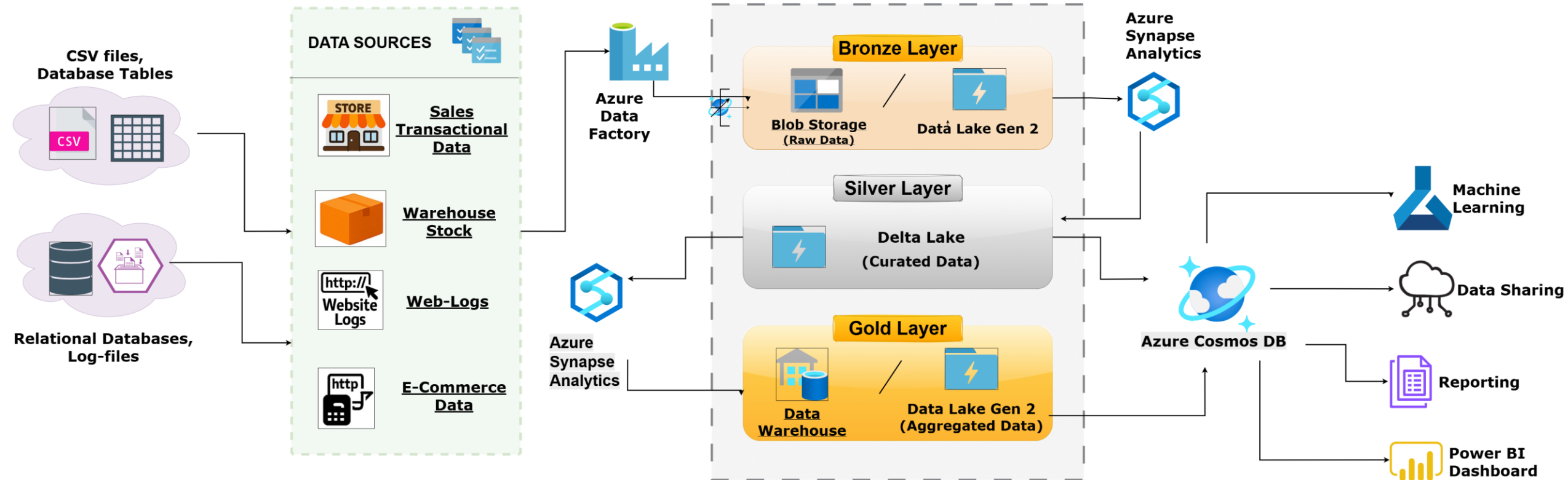
- Web Segmentation Dashboards
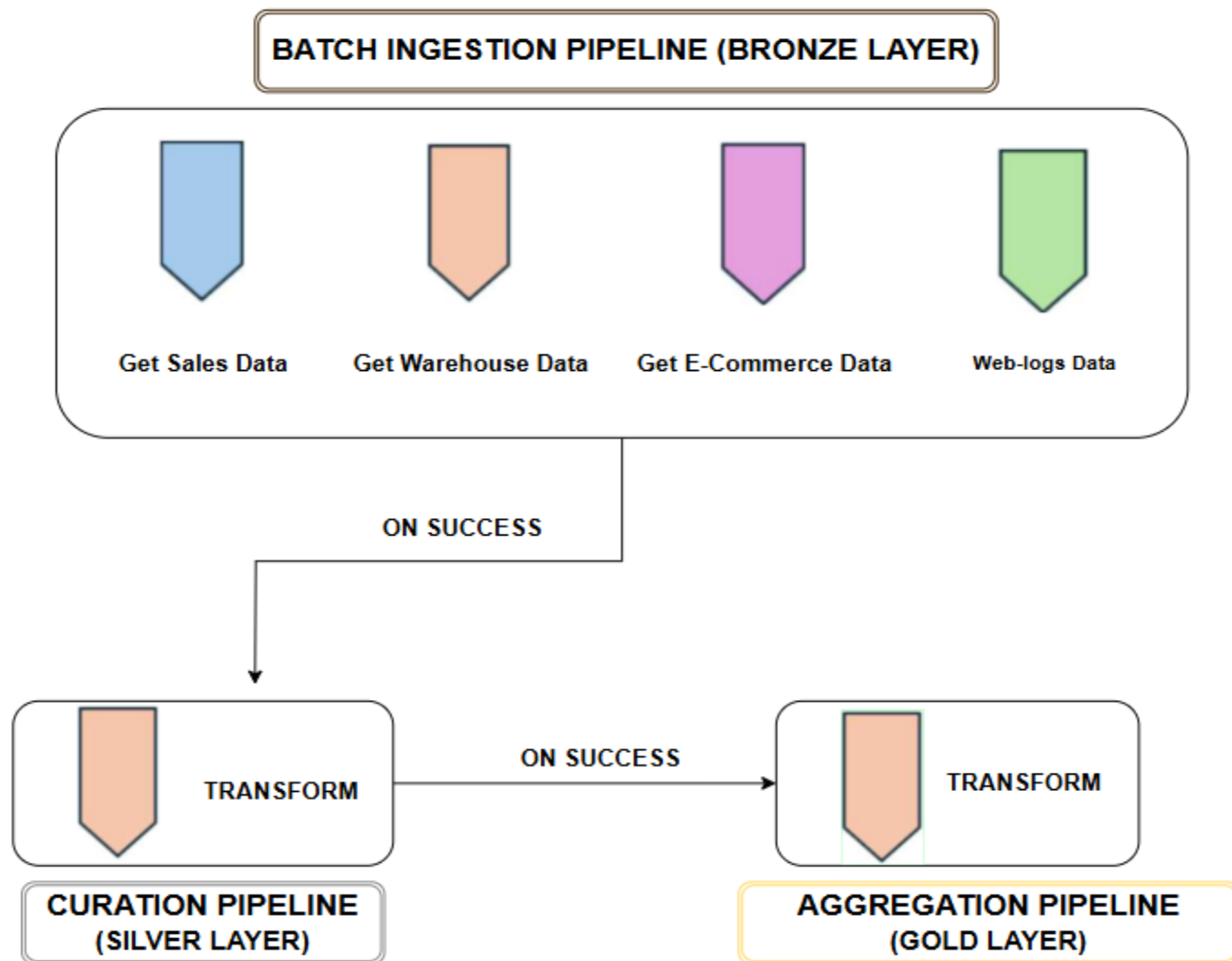
CLOUD ARCHITECTURE: PHASE 1

CLOUD ARCHITECTURE: PHASE 2

CLOUD ARCHITECTURE: PHASE 3

MASTER PIPELINE FLOWCHART

CONCLUSION

To conclude, our proposed cloud architecture is more than just a tech stack—it's a strategic initiative to help Sofa-so-good scale operations, improve decisions, and stay competitive through smart data usage.

This architecture not only take into consideration technical development but also is a cost effective and optimized solution according to business requirements.
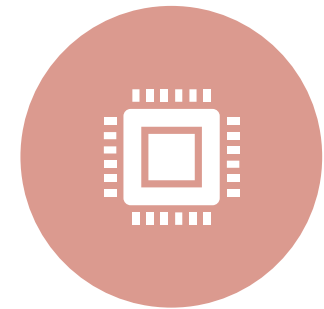
TEAM CONTRIBUTION

JESUS MEDINA:
RESEARCH AND
PLANNING

SWARA PATEL:
DOCUMENTATION AND
PRESENTATION

EMMANUEL FALONIPE:
VISUALIZATION AND
OUTPUTS

PRAVEEN CHAUDHARY:
DATA ENGINEERING
DESIGN.

THANK-YOU