Data ingestion layer (Google Cloud data flow)

* + ETL Processes: Employ Extract, Transform, Load (ETL) processes to integrate data from diverse sources into a unified format.
  + Real-time Data Integration: Implement real-time data integration for timely insights and responsiveness.

Data storage (Google Cloud Storage)

* + Structured Data Warehouse: Utilize a relational database for structured data to maintain consistency and support SQL queries efficiently.
  + Data Lake: Incorporate a data lake for storing raw, unstructured data, enabling flexibility and scalability.

Data modeling(Big Query)

* Star Schema: Implement a star schema for the structured data warehouse to enhance query performance and simplify data navigation.
* Normalized Data Structures: Normalize data structures to reduce redundancy and enhance data integrity.
  + Role-Based Access Control (RBAC): Implement RBAC to ensure that different stakeholders have access to the data relevant to their role
  + Data Encryption: Apply encryption techniques to secure sensitive data, both at rest and in transit(Google cloud Key management Service).

Scalability(Google Kubernetes Engine)

Cloud Infrastructure: Leverage cloud-based infrastructure to facilitate scalability based on varying workloads.