Aniaran – GCP Betting Analytics: 1■Pager

Goal: Real■time betting analytics with robust governance, and a *Talk to Your Data* (RAG) module for natural■language insights.

Core Flow: App → Pub/Sub → Dataflow (DLQ + errors) → BigQuery (partitioned/clustered) → Looker Studio/Looker.

Ops & Governance: Cloud Composer (snapshots, DQ, alerts), RLS/CLS in BigQuery, Terraform + CI.

RAG (*Talk to Your Data*): GCS docs → BigQuery vectors → Vertex AI (embeddings + LLM) → Cloud Run API → Slack/Teams/Streamlit.

Why it wins
- Time■to■insight with governed reporting (Looker Studio/Looker).
- Operational reliability (DLQ, error tables, DQ, alerts).
- Cost■aware analytics (BQ partitions/clusters).
- AI■ready without disruption (RAG overlays facts + docs).

Tech Map (GCP)
- Ingest: Pub/Sub
- Transform: Dataflow (Apache Beam)
- Orchestrate: Cloud Composer
- Store: BigQuery, GCS
- Serve: Looker Studio/Looker
- AI: Vertex AI + Cloud Run
- Sec: IAM, BigQuery RLS/CLS

Interview Soundbite
> "We deliver live analytics in BigQuery with governed dashboards and add a *Talk to Your Data* layer so teams can query the truth via natural language — grounded in our data, not LLM guesses."