Document 3: Project Charter – AI Infrastructure Overhaul

Project Code: ALPHA-OMEGA-99

Project Manager: Elena Rodriguez

Priority Level: P1 (Critical)

Status: Approved for Implementation

1. Project Purpose

To modernize the underlying data architecture to support the **AI-Powered Strategy Planning System**. The current infrastructure suffers from high latency (>200ms) which prevents real-time strategy adjustments.

2. Scope of Work

- **Data Lake Migration:** Move 4.2TB of legacy structured data to a unified vector-optimized cloud environment.

- **API Integration:** Develop custom middleware to connect the Strategic Engine with real-time market feeds (Bloomberg/Reuters APIs).

- **Security Layer:** Implement AES-256 encryption for all data at rest and in transit.

3. Resource Allocation

Resource Type	Description	Allocation
Human Capital	Senior Data Engineers	3 Full-Time
Human Capital	AI Ethics Consultant	10 Hours/Week
Financial	Infrastructure Budget	$120,000
Technology	GPU Clusters	4x NVIDIA H100 (On-demand)

4. Risk Assessment & Mitigation

- **Risk R1: Data Silos.** * *Description:* Historical data in the HR department is in a format incompatible with the new ingestion engine.
    - *Mitigation:* Deploy a pre-processing ETL (Extract, Transform, Load) script by Week 3.

- **Risk R2: Token Cost Inflation.** * *Description:* High usage of LLM tokens during the testing phase may exceed the $120k budget.
    - *Mitigation:* Implement a hard-cap usage monitor on the developer API keys.

5. Timeline Milestones

1. **Phase 1 (Preparation):** Complete by March 15.

2. **Phase 2 (Migration):** Start March 16; End April 10.

3. **Phase 3 (Testing):** User Acceptance Testing (UAT) to conclude by May 1.