Proposal for Establishing Genesis: An Offshore Engineering Hub in Chennai

Executive Summary
This document outlines a comprehensive proposal for establishing Genesis, a Chennai-based offshore engineering hub. Genesis will cater to the energy and manufacturing domains, aligning with the VC's strategic vision under two potential scenarios:

1. **Scenario A**: The VC provides a platform and solutions.
2. **Scenario B**: The VC does not provide a platform and solutions, requiring Genesis to develop them from scratch.

This phased approach ensures scaling to a 60-member team, delivering high-quality platform solutions and domain-specific applications. The proposal includes team composition, skill sets, delivery expectations, and key questions with potential answers to clarify next steps.

Strategic Vision

Goals for Genesis

- Establish a scalable engineering hub in Chennai within 18 months.
- Build or customize a platform and deliver tailored solutions for energy and manufacturing clients.
- Foster innovation in AI/ML, data engineering, and domain-specific applications to address client challenges effectively.

Differentiators

- Dual focus on platform robustness and client-specific customizations.
- Cost-effective operations leveraging skilled talent in Chennai.
- Phased hiring and milestone-driven execution to ensure optimal resource utilization.

Scenarios for Execution

Scenario A: VC Provides a Platform and Solutions

- **Primary Focus**: Customizing and operationalizing the platform for client-specific needs.
- **Timeline**: Faster delivery due to the foundational platform.
- **Team Responsibilities**:
    - Platform customization for energy and manufacturing use cases.
    - Scaling platform capabilities to onboard multiple clients.

Scenario B: VC Does Not Provide a Platform and Solutions

- **Primary Focus**: Building a platform from scratch with incremental feature additions.
- **Timeline**: Requires more time for development but offers full control and IP ownership.
- **Team Responsibilities**:
    - Developing the platform MVP.
    - Expanding platform features and delivering client solutions.

Team Structure and Skill Sets

Core Teams

1. **AI/ML Development Teams**
    - **Primary Functionality**: Build and deploy machine learning models for predictive analytics and optimization.
    - **Key Skills**: TensorFlow, PyTorch, LangChain, Python, Java, LLM development, NLP expertise.
2. **Data Engineering Teams**
    - **Primary Functionality**: Design and maintain scalable data pipelines and lakes.
    - **Key Skills**: Apache Spark, Kafka, AWS, GCP, ETL processes.
3. **Platform Infrastructure Teams**
    - **Primary Functionality**: Manage CI/CD pipelines, ensure scalability, and handle DevOps operations.
    - **Key Skills**: Kubernetes, Docker, Terraform, Prometheus, Grafana.
4. **Domain-Specific Application Teams**
    - **Primary Functionality**: Develop tailored solutions for energy and manufacturing domains.
    - **Key Skills**: IoT, MES systems, robotics. (TBD)
5. **QA and Testing Teams**
    - **Primary Functionality**: Ensure delivery quality through automated and manual testing.
    - **Key Skills**: Selenium, Playwright, Postman.
6. **Business Analysts and Project Managers**
    - **Primary Functionality**: Translate business needs into technical requirements and ensure project delivery.
    - **Key Skills**: Agile methodologies, Jira, domain expertise.

Phased Execution Plan

Phase 1: Initial Setup (0–6 Months)

- **Scenario A**: Customize and integrate the provided platform for pilot clients.
- **Scenario B**: Build the platform MVP with foundational features.
- **Deliverable**: Functional platform operational for early use cases (Scenario A) or Platform MVP ready for internal testing (Scenario B).

Phase 2: Expansion (7–12 Months)

- **Scenario A**: Develop client-specific extensions and domain customizations.
- **Scenario B**: Add advanced features to the platform and deliver solutions for pilot clients.
- **Deliverable**: Fully operational solutions for 1–2 pilot clients.

Phase 3: Full Operation (13–18 Months)

- **Scenario A**: Scale solutions to support 3–5 clients.
- **Scenario B**: Finalize platform features and scale client solutions.
- **Deliverable**: Robust platform and solutions for 3–5 clients.

Delivery Expectations

Scenario A

- 0–6 Months: Functional platform operational for pilot clients.
- 7–12 Months: Solutions for 1–2 pilot clients.
- 13–18 Months: Full platform deployment for 3–5 clients.

Scenario B

- 0–6 Months: Platform MVP ready for testing.
- 7–12 Months: Full platform operational for pilot clients.
- 13–18 Months: Robust platform and solutions for 3–5 clients.

Platform-Related Questions

1. **What capabilities does the provided platform have (if any)?**
    - Does it include APIs, a microservices architecture, or prebuilt modules for energy and manufacturing use cases?
    - Is the platform customizable, and what are the limitations of customization?

    - What are the expected performance benchmarks for the platform in its current state?
2. **What is the platform's current technology stack and its tools?**
    - Does the stack include proprietary or open-source technologies?
    - Are there any preferred tools or frameworks we must adhere to?
3. **What documentation and resources are available for the platform?**
    - Are there detailed design documents, technical specifications, and developer guides?
    - Is the platform already tested and validated for scalability and robustness?
4. **What level of support will be provided for platform integration?**
    - Is there a team available for technical support or knowledge transfer?
    - Will we receive regular updates and patches for the platform?

Budget and Financial Questions

5. **Is the $2M budget fixed, or can it be reallocated?**
    - Are there provisions for additional funding if unforeseen challenges arise?
    - Can the budget be reprioritized across phases (e.g., more for development or hiring)?
6. **Who will manage the budget? And will the allocation of funding happen in phases?**
7. **What are the VC's priorities in allocating the budget?**
    - Are there specific constraints for operational costs, infrastructure, or hiring?

Strategic Vision and Expectations

7. **What is the long-term vision for Genesis?**
    - Is the hub intended to expand into new domains beyond energy and manufacturing?
8. **What metrics will define success for this initiative?**
    - Are there specific KPIs, such as client acquisition, platform scalability, or cost efficiency?
9. **What are the expected timelines for delivering results?**
    - How critical is adhering to the 18-month plan, and what are acceptable deviations?

Client and Market Insights

10. **Who are the target clients for Genesis?**
11. **Are there existing client commitments or pilots?**
    - Do we need to align our platform solutions with specific client requirements?

Team and Operational Support

13. **What is the VC's expectation regarding team composition?**
    - Should we focus more on platform development, domain expertise, or QA and testing?
14. **Will the VC provide access to any pre-existing talent or partnerships?**
    - Are there preferred recruitment agencies or connections to leverage?
15. **What operational support will the VC provide?**
    - Does this include legal, HR, or administrative help for setting up the hub?

Risk Management

16. **What risks are considered critical by the VC?**
    - Are there specific risks (technical, operational, or market-related) that need to be mitigated proactively?
17. **How much autonomy does Genesis have in decision-making?**
    - Are there restrictions on technology choices, vendors, or operational strategies?

Intellectual Property (IP)

18. **What is the IP strategy for Genesis?**
    - Who owns the IP if the platform is built from scratch?
    - Are there specific IP considerations when customizing the provided platform?

Collaboration and Governance

19. **What is the governance structure for Genesis?**
    - Will there be regular reporting to the VC, and at what frequency?
    - Are there board-level expectations or oversight mechanisms?
20. **What level of collaboration is expected with the VC's other initiatives?**
    - Should Genesis integrate with or complement any of the VC's existing ventures?