Business Paperwork:

**3-Month Data Scientist Engagement (Phase 1)**

**Prepared For:** Management / Key Stakeholders  
**Date:** July 4, 2025

**Executive Summary**

This document outlines the strategic engagement of a freelance Data Scientist to establish foundational capabilities for the MSD Alliance Data Integration. The 3-month scope includes data consolidation, infrastructure setup, MVP dashboard development, and compliance framework initiation. The proposed investment of **MYR 59,340**, plus a one-time pre-project review fee, enables a low-risk, high-impact entry into enterprise-level analytics.

**Engagement Objectives**

* Launch a scalable, secure, and compliant data foundation.
* Enable MCMC to derive real-time insights from integrated datasets.
* Lay groundwork for subsequent analytics and automation phases.

**Objective**

To initiate a secure, scalable, and actionable data foundation that enables MCMC to make real-time, insight-driven decisions based on integrated datasets.

**Scope of Work (Phase 1: Months 1–3)**

* **Data Consolidation:** Merge ~1–2 million records from DUSP, MCMC, and Tech Partner sources.
* **Infrastructure Setup:** Configure secure AWS-based data pipelines.
* **MVP Dashboard:** Deliver stakeholder-ready visualization platform (e.g., Power BI).
* **Compliance Foundation:** Align with PDPA and national data protocols.

**Deliverables**

* Secure cloud setup (AWS-based).
* Secure ingestion pipelines with encryption protocols.
* MVP dashboard with key metrics.
* Initial data governance and compliance documentation.

**Project Milestones:**

* **Month 1 (Weeks 1-4):** Data onboarding, pipeline setup, security protocols.
* **Month 2 (Weeks 5-8):** Live MVP dashboard, stakeholder feedback cycle.
* **Month 3 (Weeks 9-12):** Optimizations, compliance audit, next-phase planning.

**Key Benefits**

* Fast, low-capex foundation.
* Real-time decision insights.
* Compliance-ready architecture.
* Basis for next phases.

**Budget Overview (3-Month Estimate)**

* **Total Cost:** MYR 59,340
* **Pre-Project Review Fee:** MYR 5,934 (one-time)

**Detailed Estimate**

| **Category** | **Type** | **Item** | **Est. Cost (MYR)** |
| --- | --- | --- | --- |
| I. Hardware (CapEx) | Local Workstation | Laptop, Monitor, Peripherals | 8,000 |
| II. Software (OpEx) | Licenses | Productivity Suite, Power BI | 180 |
| III. Cloud Infra (OpEx) | Compute, Storage, DB, ETL, Security | AWS (EC2, Glue, Redshift, RDS, IAM, etc.) | 2,100 |
| IV. Connectivity (OpEx) | Services | Business Internet, VPN, Antivirus | 390 |
| V. Workforce (OpEx) | Freelance DS | 60 Mandays | 48,000 |
| VI. Contingency (OpEx) | Buffer | 15% of Cloud Infra | 300 |
| **Total** |  |  | **59,340** |

*Note: Infrastructure costs can remain optional and separated from service fees.*

**Key Responsibilities (Months 1-3)**

* Audit, assess, and consolidate complex datasets from disparate platforms.
* Develop and implement frameworks for data cleansing, standardization, and reconciliation.
* Design an integrated and secure data architecture for initial data integrity and accessibility.
* Ensure compliance with data governance, privacy laws, and security protocols for initial data sets.
* Collaborate with internal stakeholders to identify data gaps, pain points, and reporting needs for the MVP.
* Provide strategic recommendations for initial system integration or modernization efforts.

**Charge Justification (Service Fee)**

* **Lean Setup:** Provides Data Engineering, Analyst, and Project Management coverage within the 3-month scope.
* **Large Volume:** Establishing scalable pipeline for ~1-2M records.
* **No Infra in Place:** Ground-up deployment and configuration for initial phase.
* **Secure PII Handling:** Designing initial compliance standards.
* **Custom Dashboards:** Building MVP tailored to organisation needs.
* **Automation Focus:** Setting up initial automation for low team overhead.

**Next Steps**

1. **Approval:** Secure internal sign-off for Phase 1 budget.
2. **Pre-Project Review:** Confirm engagement scope and align resources.
3. **Engagement:** Finalize freelance Data Scientist contract.
4. **Kick-off:** Schedule stakeholder workshop and project launch.