

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			RM 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.