

Business Paperwork:

3-Month Data Scientist Engagement (Phase 1)

Prepared For: Management / Key Stakeholders

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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, **remote server VM infrastructure setup**, MVP dashboard development, and compliance framework initiation. The proposed investment of MYR 47,870, 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 remote server-based** 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 **hosted via internal virtual machines (VMs) and remote servers**.

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 **VM-based remote server pipelines** (replacing AWS setup).
- **MVP Dashboard:** Deliver stakeholder-ready visualization platform (e.g., Power BI).
- **Compliance Foundation:** Align with PDPA and national data protocols.

Deliverables

- Secure **remote server (VM-based)** environment setup.
- 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, **VM 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 using existing or local VM infrastructure.
- Real-time decision insights.
- Compliance-ready architecture.
- Basis for next phases.

Budget Overview (3-Month Estimate)

- **Total Cost:** MYR 45,780
- **Pre-Project Review Fee:** MYR 5,934 (one-time)

Detailed Estimate

Category	Type/Item	Revised	Comment
I. Hardware (CapEx)	Local Workstation	-	Provided (Laptop)
II. Software (OpEx)	Licenses - PowerBI	180	Visualisation
III. Cloud Infra	Compute/Storage-Database/ETL/Security/Data Transfer	-	Provided (Remote Server VM)
IV. Connectivity	Services, Business Internet, VPN, Antivirus	390	
V. Workforce	Lean Team (PM/DE/DS/DV)	48,000	
VI. Contingency	Buffer	300	
SUBTOTAL		39.936.00	

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 **VM-based 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 **using remote server VM instead of public cloud.**
- **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.