

Dynamic Marketplace Lot - Data Engineering Services

This lot covers the provision of specialist data engineering services to support the design, development, optimisation, and ongoing operation of Oak National Academy's data infrastructure and business intelligence systems. Suppliers appointed to this lot will contribute to the continuous improvement of Oak's **data platform and dbt-based transformation layer**, operating within established modelling standards, testing frameworks, and deployment workflows.

Suppliers appointed to this lot will work within Oak's existing **data architecture, dbt conventions, infrastructure patterns, and governance practices**, ensuring consistency, maintainability, and high data quality across the analytics estate. They will strengthen shared modelling standards and support scalable, reliable data foundations that enable accurate, timely, and actionable insight across product, engineering, and operational teams.

Oak's current data platform is built on Google BigQuery, dbt, and Infrastructure-as-Code tooling (e.g., Terraform). Suppliers appointed to this lot will be required to work within this established architecture and governance framework. Demonstrable experience working within comparable modern cloud-based data warehouse and transformation environments is expected.

Scope of Services

The scope of this lot includes, but is not limited to:

- **Data Engineering Within Established Standards** – development and continuous improvement of data ingestion pipelines, transformation layers, and orchestration systems, operating within Oak's established architectural patterns, dbt project structure, naming conventions, documentation standards, and testing requirements.
- **Data Pipeline and Orchestration Development** – design, implementation, and optimisation of scalable, reliable data pipelines and workflow orchestration systems that integrate with Oak's dbt-based transformation layer and support analytics and product data use cases.
- **SQL and Cloud Data Warehouse Engineering** – Our current data warehouse environment is based on Google BigQuery. Suppliers appointed to this lot

must demonstrate experience working within modern cloud-based SQL data warehouse environments of comparable scale and complexity.

- **dbt Transformation and Data Modelling** – development, extension, and optimisation of modular, version-controlled transformation workflows using dbt, including implementation of robust testing, documentation, and lineage practices to support analytics and emerging data products.
- **Customer Data Platform (CDP) Integration** – collaboration with marketing and product teams to define customer data requirements, configure and manage new data source connections, and design and maintain customer-centric data pipelines.
- **Infrastructure as Code (e.g., Terraform)** – development and maintenance of data platform infrastructure using Infrastructure as Code practices, including provisioning and managing data warehouse resources, dbt environments, pipeline components, permissions, etc.
- **Testing, Documentation, and CI/CD** – implementation and extension of dbt-native testing, documentation generation, lineage tracking, and deployment workflows, ensuring all contributions meet Oak’s reliability and quality standards.
- **Data Quality, Reliability, and Scalability** – maintenance and enhancement of structured validation, monitoring, and operational controls to ensure Oak’s dbt transformations and broader data processing systems remain reliable, scalable, and production-ready.
- **Product and Cross-Functional Collaboration** – working closely with product managers, engineers, and data colleagues to plan, capture, and structure data in line with Oak’s modelling principles and iterative product development practices.
- **Performance and Cost Optimisation** – refinement of dbt models, warehouse usage, and transformation logic to improve efficiency, reduce latency, and manage compute costs at scale.
- **Documentation and Knowledge Transfer** – production of clear technical documentation, modelling guidance, and handover artefacts aligned to Oak’s standards to ensure long-term maintainability by Oak or other suppliers.
- Add: Oak reserves the right to evolve its data architecture during the lifetime of the Dynamic Market, and suppliers must be capable of adapting to changes within modern cloud-based data engineering environments.

Submit your Conditions of Participation Document using the form below:

https://docs.google.com/forms/d/e/1FAIpQLSdpzo_LLChr9pmH7Bc4vFAsUDbue5zc-m0_12I6fnFzRfXq-A/viewform?usp=publish-editor

Successful submission is not a guarantee of any contract award. Please ensure to refer to the Dynamic Market notices.