

Data Foundations & Analytics Enablement Services

Reliable, Scalable and Trusted Data Across the Enterprise

This service delivers structured assessment, engineering and uplift of enterprise data environments to establish reliable, scalable and trusted data foundations. It addresses fragmented data landscapes, improving data quality, consistency, integration and governance to support analytics, reporting and decision-making.

It aligns data architecture, pipelines and governance models to enable automated data flows, high-performance analytics and readiness for advanced insight, AI and machine learning.

Service Benefits

- ▶ Improves data quality, consistency and trust across operations
- ▶ Enables scalable data models for advanced analytics maturity
- ▶ Reduces manual effort through automated pipelines and workflows
- ▶ Improves performance, reliability and scalability of data platforms
- ▶ Enhances decision-making through trusted insights and consistent delivery

Data Maturity Framework

A modular service progressing data capability through Stabilise, Standardise and Optimise.

▶ Stabilise

Establishing trust, structure and governance:

Data auditing, profiling and review

Data quality rule creation and scoring

Metadata, taxonomy & glossary development

Data lifecycle & retention modelling

Governance baseline & ownership assignment

▶ Standardise

Building scalable and consistent data integration layers:

Data model & schema design refinement

Ingestion & transformation pipelines (batch, streaming)

Consolidated data layers (raw, curated, trusted)

Query optimisation & indexing strategies

Integration pattern design (API, CDC, event-driven)

▶ Optimise

Enabling high-performance insights and analytics:

Optimising BI datasets, semantic models and reports

Real-time analytics and event stream processing

ML-ready datasets & feature engineering patterns

Dashboard performance tuning & refresh automation

Data observability: freshness, volume, drift, lineage & monitoring

Data Strategy, Governance & Architecture

Strategic direction, organisational alignment and structured data control framework:

- Enterprise data architecture definition
- Future-state roadmap development
- Policy and standards creation
- Governance model and operating roles
- Metadata, taxonomy and information structures
- Data lifecycle, retention and compliance alignment

Data Quality Management

Ensuring enterprise-wide trust in data assets:

- Quality rule definition & scoring
- Profiling across all sources
- Validity, completeness & accuracy checks
- Master/reference data readiness
- Golden record modelling (MDM-lite)
- Automated quality monitoring

Data Modelling & Structure Design

Designing robust and consistent information structures:

- Conceptual, logical & physical data models
- Schema optimisation & restructuring
- Dimensional modelling for BI (star, snowflake)
- Normalisation/denormalisation strategies
- Semantic model design for reporting layers
- Standardised metadata structures

Data Integration & Pipeline Engineering

Building automated, scalable ingestion & transformation processes:

- Batch ETL/ELT pipelines
- Streaming & real-time ingestion
- CDC (Change Data Capture) patterns
- Event-driven architectures
- API-based ingestion & transformation
- Orchestration workflows & pipeline scheduling

Data Migration & Consolidation

Structured movement and centralisation of data assets into governed platforms:

- Legacy-to-modern data layer migration
- Structured & unstructured data ingestion
- Data-level database migration
- ETL/ELT pipeline re-platforming
- BI dataset & semantic model migration
- Data mapping, validation & consolidation

SQL & Performance Optimisation

Improving speed, scale & reliability of data workloads:

- Query & execution plan tuning
- Indexing & partitioning strategies
- Storage optimisation
- High-volume data processing optimisation
- Caching & acceleration patterns
- Performance monitoring & remediation

Data Observability & Monitoring

Ensuring ongoing reliability of data platforms:

- Freshness, completeness & volume monitoring
- Drift detection for data & schema
- Lineage tracking & automated documentation
- Pipeline performance & failure analysis
- Alerting & reporting dashboards
- Data SLO definitions

Analytics, BI & Reporting Services

Enhancing insight delivery and consistency:

- KPI & metric standardisation
- BI dataset & model optimisation
- Semantic modelling & shared datasets
- Dashboard performance tuning
- Report rationalisation & consolidation
- Automated refresh & dependency pipelines

Real-Time Analytics & Streaming

Enabling rapid insights and continuous event processing:

- Event ingestion & stream processing
- Real-time transformation & routing
- Incremental model updates
- Low-latency analytical consumption patterns
- Streaming observability & checkpointing
- Integrated batch + streaming architectures

ML Readiness & Feature Engineering

Preparing enterprise data for machine learning workloads:

- Feature store design patterns (vendor-neutral)
- Feature extraction & dataset engineering
- Model input/output pipeline readiness
- Curated, structured ML datasets
- Scalable compute-ready modelling layers
- Data drift & model data-quality monitoring

Deliverables

This service provides deliverables aligned to the specific areas selected in scope, which typically include:

- Data discovery, assessment and maturity analysis
- Data strategy definition and roadmap development
- Data architecture design, modelling and platform alignment
- Data engineering, ingestion, transformation and pipeline build
- Data cleansing, standardisation, deduplication and validation
- Data labelling for analytics, AI and ML workloads
- Data quality profiling, rules, scoring and monitoring
- Metadata management, catalogue setup and governance framework enablement
- Master data and reference data structure design
- Cloud data platform configuration, optimisation and workload migration
- Lakehouse, warehouse or data mart design and deployment
- BI and analytics development, dashboards and self-service reporting
- AI/ML environment enablement, feature engineering and model operationalisation
- Integration patterns, APIs and event-driven data flows
- Data observability, lineage, audit and monitoring setup
- Security, compliance and access control alignment for data assets
- Documentation, runbooks, standards and knowledge transfer
- Hypercare, early-life support and service transition
- Project management, governance and stakeholder reporting

Service Levels

- 9–5 UK time, Monday to Friday
- Workshops and reviews scheduled in advance
- Defined response and escalation routes
- Document delivery milestones defined in the engagement plan
- Escalation routes confirmed at engagement outset

Pricing Model

- SFIA-aligned day rates for uplift or project work
- Fixed-price assessment packages available
- Scope and pricing finalised after scoping activities

Engagement Options

Supporting flexible delivery across Stabilise, Standardise and Optimise:

- **Project Delivery** - Structured execution of data audits, modelling, pipelines and optimisation
- **Team Augmentation** – Data specialists, including but not limited to data engineers, architects, analysts and BI specialists
- **Specialist Resourcing** - Short-term DBA, engineering or analytics expertise for tuning, optimisation or migration

Security & Compliance

- Staff screened to BS7858:2019.
- NPPV or SC clearance available on request and scoped separately (not included in standard rate card)
- Processes aligned to ISO 27001, 9001, 20000-1 and 14001
- GDPR-compliant handling of customer data

Customer Responsibilities

- Provide access to environments, tooling, test data and stakeholders
- Ensure availability for workshops, reviews, testing and approvals
- Supply accurate architectural and operational information required for delivery
- Maintain governance, releases and change-control processes
- Approve deliverables, changes and planned activities in a timely manner

Offboarding

- Handover of all planning artefacts and documentation
- Knowledge-transfer session(s)
- Closure review with next-step recommendations



Contact us to discuss your requirements.

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