

AI Data Governance Framework

Snapshot — implementation steps & workstreams, aligned to the DAMA-DMBOK 11 knowledge areas and AI-specific overlays (ISO/IEC 42001, NIST AI RMF)

11	6	6	ISO 42001
DAMA-DMBOK knowledge areas mapped	Implementation phases	Workstreams to stand up	& NIST AI RMF aligned overlay

1 OBJECTIVE

Establish a data governance framework — built on the DAMA-DMBOK's 11 knowledge areas, with Data Governance as the coordinating hub — extended with an AI/model governance overlay so that data feeding, training, and produced by AI systems is trustworthy, secure, high-quality, and compliant, rather than left to grow as an ungoverned side effect of AI adoption.

2 IMPLEMENTATION STEPS (phased approach)

- 1. Assess & Baseline** — current-state data & AI governance maturity assessment against the DAMA-DMBOK 11 knowledge areas and AI-specific risk domains

2. Define Framework & Policy — governance charter, data & AI policies, standards, and controls mapped to DAMA knowledge areas plus ISO/IEC 42001 & NIST AI RMF

3. Establish Operating Model — stand up a Data & AI Governance Council, define roles (CDO, Data Stewards, AI Risk Owners), decision rights and RACI
- 4. Stand Up Workstreams & Pilot** — mobilize workstreams against priority data domains and one or two AI use cases as governance pilots

5. Implement Tooling & Controls — data catalog, lineage, quality monitoring, model registry, bias/explainability testing, access controls

6. Monitor, Measure & Mature — KPI/maturity scorecard, periodic audits, continuous improvement cadence with the Governance Council

3 WORKSTREAMS TO STAND UP

Workstream	Scope	Primary owner
Data Governance & Policy	Charter, policy, standards, decision rights, issue escalation	Chief Data Officer
Data Quality & Metadata	Quality rules, lineage, metadata catalog for AI training & reference data	Data Quality Lead
Data Architecture & Integration	Pipelines, cloud-native architecture feeding AI/ML systems	Data Architecture Lead
Data Security & Privacy	Access control, PII/PHI handling, data minimization, retention	CISO / DPO
AI & Model Governance	Model risk, explainability, bias testing, monitoring — ISO 42001/NIST AI RMF	Responsible AI Lead
Compliance & Regulatory	UK GDPR, EU AI Act, sector-specific regulatory mapping	Compliance Lead

4 DAMA-DMBOK ALIGNMENT

- Core (DAMA):** Governance, Architecture, Modeling & Design, Storage & Operations, Security, Integration, Master/Reference Data, Warehousing & BI, Metadata, Quality
- AI overlay:** Model risk, explainability & bias testing, training-data provenance, AI use-case risk tiering — referencing ISO/IEC 42001 & NIST AI RMF

5 GOVERNANCE OPERATING MODEL

- Council:** cross-functional, chaired by CDO, sets policy & resolves escalations
- Data Stewards:** domain-level accountability for quality, definitions, access
- AI Risk Owners:** per-use-case accountability for model risk & monitoring

6 HIGH-LEVEL 12-MONTH TIMELINE BY WORKSTREAM

Workstream	Q1 — Foundation	Q2 — Build	Q3 — Pilot & Scale	Q4 — Mature & Embed
Data Governance & Policy	Charter & council formed	Policies published, RACI live	Stewardship operating across priority domains	Maturity scorecard v1, exec review
Data Quality & Metadata	Baseline quality assessment	Quality rules live, catalog pilot	Quality monitoring dashboards live	Catalog coverage expanded org-wide
Data Architecture & Integration	Current-state review, target design	Pipeline standards, pilot integration	Additional domains onboarded	Legacy migration roadmap agreed
Data Security & Privacy	Access & PII inventory	Classification & access remediation	Monitoring & incident response drill	Annual access recertification
AI & Model Governance	Use-case inventory, risk tiering	Model registry live, first pilot onboarded	Bias/explainability testing, monitoring live	Full AI portfolio under governance
Compliance & Regulatory	Regulatory gap analysis	Policy-to-regulation mapping complete	First audit cycle, evidence process live	Annual compliance report to board