Data Information Structure Design service definition

Overview

Our Data/Information Structure Design service is dedicated to local authorities in the public sector, delivering expertly crafted frameworks for organising and managing data ecosystems in preparation for cloud adoption and ongoing digital operations. This service transforms fragmented or legacy data environments into logical, scalable structures that optimise storage, flow, retrieval and governance. It fully complies with UK standards, including the Government Digital Service (GDS) Data Ethics Framework, Government Data Quality Framework, National Cyber Security Centre (NCSC) guidelines and GDPR requirements. By designing robust, future-proof data architectures, we enable clients to enhance interoperability, strengthen security, reduce operational costs and unlock value from data for evidence-based decision-making and improved citizen services.

Service Scope and Approach

The service commences with a detailed requirements-gathering and baseline phase, working collaboratively with data stewards, IT architects, analysts, and business stakeholders to understand current data landscapes, usage patterns and strategic objectives derived from prior audits or enterprise architecture work.

Key elements of our approach include:

- **Schema and Model Design**: Creation of logical and physical data models, schemas for relational, non-relational and data lake architectures, with definitions for tables, collections, attributes, keys and constraints.
- **Data Flow and Integration Modelling**: Mapping of transformation and pathways, identifying integration points, APIs and pipelines suitable for cloud services.
- **Security, Compliance and Scalability Integration**: Embedding controls for access, encryption, retention, and auditing, while ensuring designs scale with growing data volumes and support analytics or AI initiatives.

Deliverables

Clients receive a comprehensive suite of design outputs, including:

- A full data structure design report with detailed schemas and data flow models.
- Target-state architecture recommendations, including cloud-specific configurations, migration considerations and governance rules.
- Visual artefacts such as hierarchy diagrams, integration maps and scalability projections.

All deliverables are supplied in accessible digital formats compliant with WCAG standards and ready for incorporation into procurement, migration plans or data strategy documents.

Engagement Model

Engagements typically span 5-10 weeks, depending on data complexity, with flexible delivery via remote, on-site, or hybrid methods to suit operational constraints. We prioritise co-design workshops and review sessions to ensure alignment and knowledge transfer. Pricing is fixed fee, determined through scoping discussions, with phased options to align with public sector budgeting.

Value Proposition

This service provides the essential blueprint for efficient, secure data management in the cloud era, reducing complexity, minimising storage and processing costs and enabling advanced capabilities like real-time analytics or integrated services across departments. Local authorities achieve greater data interoperability for joined-up services, heightened compliance assurance and reduced risks in digital programmes. Our proven public sector experience delivers sustainable designs that support long-term maturity, innovation and public value while maintaining rigorous data protection and ethical standards.

This service is advisory and design-focused, providing conceptual and detailed structures without encompassing data population, technical build, testing, or deployment, allowing seamless integration with other G-Cloud services for end-to-end data transformation.