

Data Architecture

Table of Contents

1	Service description	2
1.1	Service features	2
1.2	Service benefits	2
1.3	Related services	2
2	Service provision.....	3
2.1	Requesting the service	3
2.2	Required inputs.....	3
2.3	Providing the service	3
2.4	Service deliverables.....	4
3	Service operation	4
3.1	On-boarding process	4
3.2	Service levels.....	4
3.2.1	<i>Service availability</i>	<i>4</i>
3.2.2	<i>Service performance.....</i>	<i>4</i>
3.2.3	<i>Assumptions</i>	<i>4</i>
3.3	Knowledge transfer.....	5
3.4	Off-boarding process	5
4	Service pricing, ordering and invoicing.....	5
4.1	Service pricing	5
4.2	Service ordering.....	5
4.3	Service invoicing.....	5
5	Service termination	6
6	Further information	6

1 Service description

For organisations to be able to operate effectively and to achieve business goals, they must have a clear understanding of their information needs and the opportunities available to them to exploit data as a strategic asset.

Our Data Architecture service is therefore designed to provide organisations with a clear and comprehensive picture of the sources, structures, relationships, usage, processing, management and flows of data relevant to their current and future business needs.

This provides the views and roadmaps organisations need to enable them to manage data as an asset and successfully implement data-focused business and technology services including:

- API platforms and digital ecosystems
- Big data and predictive analytics
- Enterprise application and business process integration
- Master Data Management (MDM)
- Data warehouse and Business Intelligence (BI)
- Data storage design
- Data migration
- Corporate information management
- Data Governance

Improving data usage, reducing cost and mitigating risk when planning and undertaking these activities are key benefits the service aims to deliver.

1.1 Service features

- Common Conceptual Data Model and associated views, catalogues and mappings used to define current and/or future state data architectures (as required).
- Data Glossary containing business definitions of data entities provided as standard.
- Designed to ensure data architecture is aligned with organisational strategy and business requirements.
- Data architecture roadmap.

1.2 Service benefits

- Improved data usage and reduced data management costs and risks.
- Shared business and technical vocabulary to promote understanding of the data needed to support the organisation and the systems through which it flows.
- Supports standardisation and integration of data assets across the organisation.
- Supports improved data management and governance to ensure security, quality, integrity, safety and availability of data across the organisation.
- Translates business needs into data requirements to ensure systems are designed or procured to provide users and processes with the data they require.
- Understand which data assets systems create/update or are dependent upon across the organisation.
- Proven methods and tools used to accelerate delivery, reducing time and cost while guaranteeing quality.

1.3 Related services

- Business Analysis & Process Design: to elaborate data requirements.
- Solution Architecture & Design: to elaborate system requirements.
- Data Modelling & Design: to create more detailed Common Logical Data Model.
- Requirements Management: to catalogue and manage data architecture requirements.

2 Service provision

2.1 Requesting the service

Following a request from the client, we will arrange a meeting to gain an overview of the client's project (including objectives, timelines, budget, etc.) and to understand the client's needs and types of data architecture deliverables we need to produce.

A specialist Data Architect will then be assigned to deliver the service.

2.2 Required inputs

- Project plan (or similar documentation) describing scope, objectives, stakeholders, deliverables, approach, governance processes and timelines.
- Project team roles and responsibilities.
- Any additional background information regarding the project.
- Relevant business or technical documentation, e.g. data/IT strategy, migration plan, business, data and system requirements, business process / data flows, use cases, interface specifications, data standards, models and schemas, data architecture principles and system architecture documentation.
- Data Architecture statement(s) of work.

2.3 Providing the service

We will determine the approach, order of steps and required level of detail, in consultation with the project team based on the project objectives and scope. This will include taking into consideration whether the aim is to document the current data architecture, specify the target data architecture or both.

1. We will review the project, business and system documentation. This will also include our reviewing (or creating, if necessary) and validating the project's data architecture principles.
2. We will identify and engage with the relevant business and technical stakeholders (including Data Owners and Data Custodians) to confirm stakeholder needs. This will be repeated as needed throughout the course of the project and may lead to our updating existing, or gathering additional, requirements.
3. We will agree data architecture deliverables with the project team and stakeholders, including models, viewpoints, catalogues, mappings, roadmaps and reports. Following this, we will set up data modelling toolset and repository, and select which standards, reference models, patterns, etc. to adopt.
4. Next, we will create current/target data architecture description comprising:
 - Common Conceptual Data Model showing principal types and sources of data and their relationships to one another;
 - model views that address stakeholder needs;
 - Data Glossary cataloguing conceptual data entity definitions generated from model;
 - required mappings, e.g. between,
 - conceptual data entities and Data Owners, business processes and systems to show traceability;
 - conceptual data entities of target and current systems to identify gaps and overlaps;
 - required additional diagrams, e.g. showing data flows between system components.
5. We will create an Implementation Roadmap (as required) showing key activities, milestones and estimated timelines required to transition target data architecture.

6. We will then create a Data Architecture Definition and Requirements document describing decisions, architecture and resulting requirements. This document will also explain design rationale and list any risks, assumptions, issues and dependencies.
7. Finally, we will arrange for stakeholder review(s) of deliverables for project sign-off. Depending on the project approach this may be undertaken as each individual deliverable is completed or after all deliverables have been completed.

2.4 Service deliverables

- Common Conceptual Data Model and associated artefacts including Data Glossary. Depending on the project, this may be enterprise wide or domain specific in scope.
- Implementation Roadmap (as required) showing key activities, milestones and estimated timelines.
- Data Architecture Definition and Requirements document describing decisions, architecture and resulting requirements.

3 Service operation

3.1 On-boarding process

Unless stated otherwise in the PO, we will aim to on-board the necessary specialist(s) and initiate the service within 7 working days of receiving the PO. To facilitate this, Applied Informatics will assist the client with completing the PO (if requested).

3.2 Service levels

3.2.1 Service availability

- Office hours: 09:00 – 17:00 Monday to Friday excluding national holidays.
- Specialist hours:
 - Working day: 8 hours exclusive of travel and lunch.
 - Working week: Monday to Friday excluding national holidays.

3.2.2 Service performance

- Service Account Manager will respond to all service enquiries and requests within 24 hours.
- Service Account Manager will arrange regular meetings throughout the duration of the project to monitor performance, ensure the client's needs are being met and resolve any issues.
- In the unlikely event that any part of the performance of the service is deemed unsatisfactory, Applied Informatics will:
 - agree with the client a timeframe of not more than 72 hours to resolve the issue;
 - not charge the client for the part of the service deemed unsatisfactory from the time of notification until the issue is resolved to the client's satisfaction.
- Applied Informatics will provide laptops needed for specialists to undertake their work unless use of the client's own equipment is mandated for reasons of security or because of constraints on being able to access the client's data externally.

3.2.3 Assumptions

Providing and operating this service to the client's full satisfaction is based on the following assumptions.

- Client provides a full and clear description of the required service(s) required.
- Client and Applied Informatics agree delivery timelines of requested services.
- Client responds promptly to any requests for clarification or further information.
- Service Account Manager is notified immediately the client becomes aware of any issues concerning service performance that the specialist has not been able to resolve.

3.3 Knowledge transfer

We are keen to assist clients in developing their own technical capabilities by upskilling their own staff and in-house teams where they have the capacity to do so. We will therefore be pleased to include knowledge transfer in the PO as part of the services that the specialist will provide.

If required, the Service Account Manager will work with the client to agree a knowledge transfer plan. This may range from a hand-over workshop prior to off-boarding to more comprehensive knowledge transfer such as mentoring staff throughout the specialist's period of the engagement; on-the-job training (OJT) or coaching; or assessed competency based training (CBT).

3.4 Off-boarding process

Off-boarding requirements, such as hand-over or ongoing support, may be included within the PO as part of the specified services to be provided by the specialist. If required, the Service Account Manager will work with the client to agree an exit plan, setting out the scope of the off-board requirements and timescale for meeting them in more detail.

4 Service pricing, ordering and invoicing

4.1 Service pricing

The service can be provided on time and materials basis or delivered as a fixed price package of work. See pricing document for indicative day rates of specialists.

4.2 Service ordering

Service ordering follows the G-Cloud framework contract process. The service and specialists we will provide will be detailed in the PO included within the Call-Off contract both parties will sign.

The PO will also provide the opportunity for the client to tailor the service to their specific needs and project approach, such as requesting provision of specified deliverables or additional specialist resources to support delivery.

4.3 Service invoicing

We will accurately record the time and activities undertaken by our technical specialists.

Subject to any variations of payment terms set out in the PO, clients are required to review and approve timesheets at the end of each calendar month. We will invoice and seek payment according to the terms of the call-off contract.

We can issue invoices by email, via any suitable online payments system or by post. We request payment by BACS within 30 days of the date of the invoice.

5 Service termination

Our terms and conditions provide termination by either party. Please see a copy of our Additional G-Cloud Terms and Conditions for full details.

6 Further information

For more information about this or any of our G-Cloud services, please email: enquiries@applied-informatics.com and include the following information:

- Name of service(s) in which you are interested.
- Your name, position and contact details.
- Name of your organisation.
- Brief description of your business needs.
- Indicative timescales for delivery the work.