



Data Integration and Extract, Transform and Load (ETL) Services

G-Cloud Service Definition Document



SERVICE OVERVIEW

Cognizant's data integration (DI) and Extract, Transform and Load (ETL) services enable an organisation to provision the underlying data needed to support a cloud based information management platform.

Data integration today needs to be able to handle a highly volatile and demanding array of potential data sources. These can range from traditional in house databases supporting back office process through to social listening data and potentially real time transactional or machine generated data. Often an integration process will bridge data between on premise and cloud based platforms and needs to be resilient to the current information security challenges faced by organisations.

Each of these demands a different but integrated approach to meet the needs of the business to derive value from the data.

Cognizant has a team of highly experienced data integration professionals who are well versed in all major tools in the market that support the current demands for affordable, scalable integration. Our vendor neutral approach means that we can bring impartial advice and best practice to drive the best fit solution for the organisation.

Cognizant is a grass roots information management organisation and has been delivering IM solutions globally for over 20 years. Over the course of this delivery we have created a number of value add best practices, tools, processes and approaches for this delivery. These can be used in a number of scenarios and Cognizant adopts a use case driven approach to ensure that appropriate outcomes are achieved with greatest efficiency and effectiveness.

Our DI and ETL services can be combined with other Cognizant services available through G-Cloud to provision an end-to-end Information Management solution for the organisation. These services include:

- Information Architecture Advisory Services
- Analytics and Data Science Services
- Business Intelligence Services
- Data Modelling Services
- Data Governance Services
- Master Data Management Services
- Data Quality Services

There are five services within the Cognizant Data Integration and ETL service that cover the lifecycle of an integration deployment:

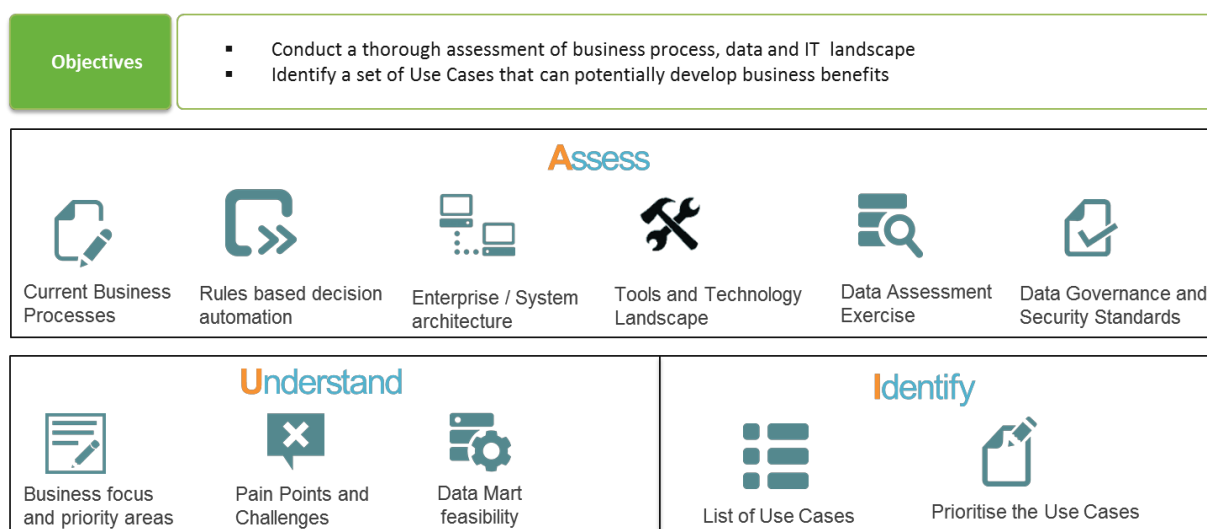
- **Data Integration and ETL Advisory Services** – provide the organisation with an analysis of the benefits data integration can realise coupled with a roadmap to achieve these.
- **Data Integration and ETL Proof Of Concept and Pilot Services** – enable a low cost entry point to prove one or two use cases from the strategy to demonstrate the expected value outcomes.
- **Data Integration and ETL Setup & Migration Services** – provide services to setup a data integration solution and migrate data and users to the solution.
- **Data Integration and ETL Testing Services** – provide services to ensure the quality, correctness, and performance of an integration solution
- **Data Integration and ETL Support Services** – perform business as usual activities to support the integration solution and its users.

Data Integration and ETL Advisory Services

The strategy and roadmap services enable an organisation to accomplish any or all of the following objectives:

- Identify and understand internal and external data sources that are needed to meet the business needs and support the value case for the expected business insights to be derived from the data
- Analyse the data quality, refresh frequency, integration approach, and costs associated with each data source
- Build a roadmap enabling the strategic vision to integrate all target data sources
- Identify quick wins that ensure ROI is maximised at every point of the implementation of the solution
- Complete a vendor selection exercise to choose the right tools to meet the data integration needs of the organisation
- Complete a readiness assessment of the organisation's infrastructure and people to determine ease of adoption and implementation of data integration solutions
- Create a business case for the execution of part or all of the roadmap

These outcomes are achieved through a time boxed discovery process. This discovery phase can be delivered as a fixed price or under T&M via the SFIA rate card. The discovery process is a deep dive seeking to Assess, Understand, and Identify as shown below



Data Integration and ETL Proof of Concept and Pilot Services

The data integration and ETL proof of concept and pilot services enable an easy first step into the implementation of an information management solution. This will normally be the recommended first implementation step in a data integration roadmap. Cognizant normally refers to these deliverables as a proof of value as it is the business value that the data can bring that is the critical driver towards adoption.

A typical proof of value project will take one or two use cases linked to no more than 3 data sources and drive them to completion thus proving the benefits that can be realised for the organisation through the integration of this data.

These exercises can also be used to demonstrate the complexity, cost and risk of bringing a new data source into the information management solution. Through the execution of the proof of value the data will be loaded into a sandpit environment where it can be analysed for issues in data quality and some simple data exploitation queries can be executed to support the business in determining the value the data will bring.

Pulling this together enables the business to make an informed decision about the data source incorporating risk as well as cost / benefit analysis.

Data integration POC and Pilot projects can be delivered under T&M using the analytics SFIA rate card or as a fixed price engagement. Cognizant can take full ownership of the delivery or add expertise to an existing analytics function or team.

Data Integration and ETL Setup and Migration Services

Each data source may demand its own approach and toolset for data integration on the cloud. These can range from traditional off the shelf ETL tools through to the new generation of big data tools and techniques that can process very high volumes of data in real time. In addition the sourcing of data can be much more than just an extract and load process with advances in social listening and the internet of things ramping up data acquisition.

Each data integration setup and migration project will be executed in line with the roadmap strategy which seeks to maximise ROI in the earliest timeframe possible. The methodology for implementation will be highly dependent on the data to be integrated and the chosen technology.

The key project milestones are as follows:

- Integration software setup on the cloud environment
- Data source connection established
- Information security and encryption process established
- Integration processes implemented

A single project can incorporate one or more integration technologies as determined by the integration strategy and the data and technical architecture blueprints for the organisation. Where applicable Cognizant will leverage tools and accelerators to kick start the delivery process whilst leveraging proven best practice techniques and templates.

Data integration setup and migration projects can be delivered under T&M using the analytics SFIA rate card or as a fixed price engagement. Cognizant can take full ownership of the delivery or add expertise to an existing analytics function or team.

Data Integration and ETL Testing Services

Our testing services enable an organisation to prove the quality and correctness of Data Integration solution and if appropriate test its performance as well.

We will be using our proven and perfected test methodology, which covers:

- Extraction process validation
- Extraction audit log analysis
- Extraction field validation
- Extraction script validation
- Data aggregation test
- History and daily data validations
- Transformation scripts validation
- Load frequency testing
- Target integrity validations
- Load performance testing

Testing Services for Data Integration can be delivered under T&M using the SFIA rate card or as a fixed price engagement.

Data Integration and ETL Support Services

The data integration and ETL support services provide the tools and expertise to run an integration platform and suite of interfaces and batch jobs.

These include the following:

- Business As Usual operation of the platform
- Validation of all data integration process
- Management and closure of support tickets (using an organisation's ticket solution)
- Administration of the integration platform
- Administration of the security of the platform
- Support of DR processes in line with the organisational DR policy
- Help Desk services
- User support
- User training
- Minor enhancements to the data integration solution

Support services can be provided in shift patterns ranging from UK working hours through to full 24/7 operational support. We also provide out of hours on call services.

Our support experts can be based out of the UK or India or a combination of both to drive longer support windows.

Normally support would be on a monthly service charge aligned to a service level agreement. However these services can be provided on a traditional fixed price fixed duration model or through T&M charging.



About Cognizant

Cognizant (Nasdaq-100: CTSI) engineers modern businesses. We help our clients modernize technology, reimagine processes and transform experiences so they can stay ahead in our fast changing world. Together, we're improving everyday life. See how at www.cognizant.com or [@Cognizant](https://twitter.com/Cognizant).

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