

Job Description

Directorate:	Resources		
Service:	Digital User Experience		
Location:	County Hall		
Salary range:	Grade 10	Grade:	10
Reports to:	Principal Integration Engineer	Staff responsible for:	None / Various (depending on team)

Job purpose and scope

To provide lead technical expertise in the data engineering specialist technical area. This role involves designing, building, and deploying scalable and automated ETL/ELT pipelines, implementing data flows, and optimising data for analytics and business intelligence (BI) systems. You will re-engineer manual data flows to enable scaling and repeatable use of data, automate core business intelligence reports, and support statutory returns.

Key responsibilities include implementing business strategies to align with the digital data strategy, supporting master data management, data cataloguing, and creating assured data sets. Additionally, the role involves supporting development work, conducting data reviews, capturing data stories, and liaising with key stakeholders to propose innovative solutions, and adhering to the target operating model for data as defined by the council's data architect. It supports the organisation's ambitions to leverage data to improve services, enhance decision-making, and drive innovation.

This role is critical in modernising our data architecture, supporting analytics, automation, and digital services. As a Senior Data Engineer, you will provide professional technical expertise in your field and mentor less experienced staff.

Performance Indicators

- Quality of advice/service against legal, safety and best practice standards
- Achievement of relevant service targets
- Adherence to internal/external quality standards if applicable
- Adherence to policies and procedures
- Accuracy and timeliness of information recording and processing
- Customer and stakeholder feedback
- Leading Lancashire Framework

Accountabilities/Responsibilities

- Provide lead data engineering technical expertise this will include, but not limited to, many of the following responsibilities:

- Provide lead technical expertise in data engineering, including designing, building, and deploying scalable and automated ETL/ELT pipelines.
 - Implement data flows, optimise data for analytics and business intelligence (BI) systems, and automate core business intelligence reports.
 - Develop Azure Synapse pipelines and create dimensional data models to enhance data utilisation.
 - Maintain detailed knowledge of Microsoft Azure cloud platform.
 - Experience with SQL Server, Visual Studio, and Microsoft Azure data fundamentals including Azure Data Lake, Azure Synapse, and Azure SQL.
 - Work in an Agile environment, utilising Azure DevOps.
 - Ensure the effective implementation of solutions, projects and programmes.
 - Technical authorship and ownership of solution designs to meet client requirements aligned with the strategic direction of ICT Services.
 - Taking technical ownership but refer to Data Manager and/or Data Architect as appropriate Interface with other Architects to take account of digital service, support and operational impacts.
 - Defining tactical actions for the data engineering, including improvements, road mapping and obsolescence, identifying and designing innovative service improvement initiatives with the Data Manager and Data Architect within the agreed data model(s) for the Council.
 - Identifying areas of opportunity to reduce costs where appropriate. Mentor, support and provide guidance to other Digital Engineers
 - Manage and prioritise the workloads of the team against agreed targets and benchmark appropriately against other teams
- **Provide data engineering support**
 - Undertake ICT problem diagnosis and resolution 3rd line including on call emergency support where required; may be required to provide full 24-hour on call emergency support.
 - Technical support recovery activities following failure, including disaster recovery.
 - Monitoring performance and propose and implement performance enhancing changes.
 - Helping to ensure that availability targets are met.
 - To develop and maintain knowledge articles.
 - Provide effective communication within the service and between other services and customers
- **Stakeholder Engagement and Communication**
 - Liaise, advise, and negotiate with key stakeholders to propose innovative solutions. • Provide effective communication within the service and between other services and customers.
 - Ensure that the customer is at the heart of all of the services delivered.
 - Deliver a customer focused service to both internal and external customers.
- **Compliance, Standards and Security**
 - Ensure industry and local standards are adhered to, including governance and compliance to corporate policy and process.
 - Ensure ITIL operational procedures are maintained.
 - Ensure adherence to security standards and policies and disaster recovery

Due to the changing nature of the business, this job description serves as a framework to outline the main areas of responsibility. It is not intended to be either prescriptive or exhaustive and will inevitably change. You are expected to be flexible and may be required to operate in different areas of work/carry out different duties as required.

Other

- **Equal Opportunities**

We are committed to achieving equal opportunities in the way we deliver services to the community and in our employment arrangements. We expect all employees to understand and promote this policy in their work.

- **Health and safety**

All employees have a responsibility for their own health and safety and that of others when carrying out their duties and must help us to apply our general statement of health and safety policy.

- **Customer Focused**

We put our customers' needs and expectations at the heart of all that we do. We expect our employees to have a full understanding of those needs and expectations so that we can provide high quality, appropriate services at all times.

- **Safeguarding Commitment**

We are committed to protecting and promoting the welfare of children, young people and vulnerable adults.

- **Skills Pledge**

We are committed to developing the skills of our workforce. All employees will be supported to work towards a level 2 qualification in literacy and numeracy if they do not have one already.

Our Values

We expect all our employees to demonstrate and promote our values:

- **Supportive**

We are supportive of our customers and colleagues, recognising their contributions and making the best of their strengths to enable our communities to flourish.

- **Innovative**

We deliver the best services we possibly can, always looking for creative ways to do things better, putting the customer at the heart of our thinking, and being ambitious and focused on how we can deliver the best services now and in the future.

- **Respectful**

We treat colleagues, customers and partners with respect, listening to their views, empathising and valuing their diverse needs and perspectives, to be fair, open and honest in all that we do.

- **Collaborative**

We listen to, engage with, learn from and work with colleagues, partners and customers to help achieve the best outcomes for everyone.

Person Specification

All the following requirements are essential unless otherwise indicated by *

Your ability to meet the job requirements will initially be assessed by the information provided on your application but further assessment will be undertaken at interview and, in some cases, by using other types of assessment(s).

Qualifications

- Professionally qualified (e.g. Industry practitioner qualifications in Data Engineering, ITIL Service Management Qualification, Foundation or above)/relevant degree (or equivalent),
- Substantial experience or substantial vocational experience demonstrating development through involvement in a series of progressively demanding roles

Experience

- Experience with cloud-based data platform solutions (e.g., AWS, Azure).
- Experience using DevOps approach to development, including CI/CD and automation.
- Experience of SQL including the ability to write and optimise stored procedures, view and queries in T-SQL
- Experience with various analytics tools to effectively process, analyse, and visualize data
- Experience with various languages such as Python, Java, Scala
- Strong experience in data engineering including implementing data processing software, data systems and designing and implementing data pipelines, ensuring data quality and integrity
- Proven track record of design or implementation of digital end-to-end solutions and resultant change
- Substantial design, systems analysis, programming or technical support
- Proven track record of design or implementation of digital end-to-end solutions and resultant change*
- Managing challenging and competing workloads

Essential knowledge, skills & abilities

- Experience with Agile development methodologies.
- Knowledge of DevOps practices and tools.
- Experience with data integration and ETL processes.
- Team leadership, line management, motivation and coaching skills
- Able to manage a range of activities according to their priority and deal with uncertainty and ambiguity
- Able to escalate issues to other parties, assign tasks and track progress (often including suppliers)
- Confidence and ability to communicate and present complex detail in a format that is understood by all
- Ability to prioritise and work to tight timescales
- Good understanding and knowledge of the products and services relevant to the advertised skill areas
- Ability to capture requirements including participation in workshops or interviews and documenting them using approved templates

- Ability to estimate effort in terms of simple time, cost and quality measures
- Ability to complete role independently or with minimal supervision/guidance and able to escalate issues as and when appropriate
- Logical thinker and innovative approach to problem solving
- Able to clearly identify the root cause of a problem and formulate and evaluate a range of solutions
- Ability to carry out basic activities in support of risk management together with the co-ordination of mitigating activities and contingencies
- Good oral and written communication skills
- Takes personal responsibility for delivery against commitments made to customers
- Makes themselves accessible to customers, communicates regularly with them and acts on feedback
- Consults and builds on the views of others
- Shares information across teams and actively helps others to achieve their objectives
- Executes responsibilities to agreed standards and deadlines

Other essential requirements

- Commitment to equality and diversity.
- Commitment to health and safety.
- Display the LCC values and behaviours at all times and actively promote them in others.

Out of hours / standby requirement

As part of Digital Services ongoing efforts to ensure smooth operations and timely support, there is an out of hours standby/call out rota in operation. This is to ensure the service can maintain high service levels and address any urgent issues that may arise outside of regular working hours.

This requirement is a feature of this position and, therefore, you may be required to take part in the standby rota on a rotating basis.

While on standby, you would be expected to be available to respond to urgent matters. This may include addressing critical issues, providing support, or coordinating with other team members as needed.

Employees on standby will receive appropriate compensation in accordance with the council's payable enhancements scheme.