Job Description



Job Title: Data Engineer	Service Area: Digita	Service Area: Digital, Data & Digital Democracy	
Directorate: Digital	Post Number:	Evaluation Number: 7285	
Grade: PO6	Date last updated: June 2024		

People at the heart of everything we do

We are committed to putting people – Newham residents and Council staff – at the heart of all we do. Our approach is a collaborative joint enterprise between residents, the Mayor, Members, Council staff and the Corporate Management Team.

Equality and Diversity

We are committed to and champion equality and diversity in all aspects of employment with the London Borough of Newham. All employees are expected to understand and promote our Equality and Diversity Policy in the course of their work.

Protecting our Staff and Services

Adherence to Health and Safety requirements and proper risk management is required from all employees in so far as is relevant to their role. All employees are expected to understand and promote good Health and Safety practices and manage risks appropriately.

Corporate parent

Every member of staff working for Newham Council should understand and fulfil our corporate parenting responsibilities for our looked after children that we have under the Children and Social Work Act 2017.

Purpose of Job

The post holder will join our Data Hub team as a Data Engineer. You will help to create business and user value from data by undertaking significant engineering projects which improve and combine data from back office and customer-facing systems. You will make sure our data, and data shared by others, is of the highest quality, highly available, usable, and shareable by rigorous standard setting and quality control. You will work with data professionals to build products and services which deliver continuous insight and value to our staff and residents.

Job Context

- The post holder will report to the Head of Data.
- The post holder will support and maintain the councils Microsoft Cloud Azure Data Platform.

- The post holder might have line management responsibility of junior Data Analysts and Engineers.
- The post holder will have regular contact with the senior managers in delivering key corporate functions for the relevant services.
- The post holder may be required to work some evenings, weekends and occasional public holidays in order to meet service requirements and to ensure appropriate representation of the Council with residents, the Mayor and elected Members, and external bodies.

Key Tasks and Accountabilities:

Key tasks and accountabilities are intended to be a guide to the range and level of work expected of the post holder. This is not an exhaustive list of all tasks that may fall to the post holder and employees will be expected to carry out such other reasonable duties which may be required from time to time.

To undertake all responsibilities listed below:

1. Provide knowledge and expertise in Microsoft Azure for data engineering.

2. Build pipelines and APIs to connect operational systems, data for analytics and business intelligence (BI) systems from hybrid environments i.e., locally hosted, supplier hosted, and Cloud based sources.

3. Work across the organisation to extract, clean, combine and store data in a way that allows it to be exploited and as an asset to help service delivery and decision making. Anonymise data wherever necessary, working within the principles of UK GDPR (General Data Protection Regulation) and with suitable data protection and sharing agreements in place.

4. Contribute to the achievement of the Council's vision, values, and strategic objectives by providing technical knowledge in Microsoft Azure within the service and across the Council, specifically regarding data storage, extraction and transformation.

5. Using data from various service systems, databases, data marts and external sources to prepare clear, accurate data models and automated performance reporting services, briefing papers, and reports for Directors and senior managers.

6. Make major contributions to our data strategy, writing good standards and practice for data engineering.

7. Build and link data sets so that data professionals/analysts can easily derive insights, including accessing sensitive data in back-office systems, extracting, and loading into appropriate technology.

8. Lead a series of data engineering projects in partnership, managing both more junior members and external partners and suppliers to reach our goals. Set direction, lead planning, manage risks and deliver on time and to budget.

9. Manage relationships with key stakeholders at project level including elected Members and Board level Directors.

10. Any other duties commensurate with the grade of the post and as requested by the line manager.

EQUALITY AND DIVERSITY

We are committed to and champion equality and diversity in all aspects of employment with the London Borough of Newham. All employees are expected to understand and promote our Equality and Diversity Policy in the course of their work.

PROTECTING OUR STAFF AND SERVICES

Adherence to Health and Safety requirements and proper risk management is required from all employees in so far as is relevant to their role. All employees are expected to understand and promote good Health and Safety practices and manage risks appropriately.



Job Title: Data Engineer	Service Area: Digital, Dat Digital Democracy	ta &
Directorate: Digital	Post Number:	Evaluation Number:
Grade: PO6	Date last updated: June 2024	

IMPORTANT INFORMATION FOR APPLICANTS

The criteria listed in this Person Specification are all essential to the job. Where the Method of Assessment is stated to be the Application Form, your application needs to demonstrate clearly and concisely how you meet each of the criteria, even if other methods of assessment are also shown. If you do not address these criteria fully, or if we do not consider that you meet them, you will not be shortlisted. Please give specific examples wherever possible.

CRITERIA	METHOD OF ASSESSMENT
KNOWLEDGE AND EXPERIENCE:	
Experience of collaborating with ICT colleagues and senior managers to identify business requirements to build products and services which deliver continuous insight and value to our staff and residents.	Application and Interview
Experience in utilising Microsoft Azure for data storage, extraction, transformation, troubleshooting and maintaining the data warehouse	Application and Interview
Experience in working with SQL and NoSQL databases.	Application and Interview
Experience with Azure resources: ADLS, Synapse, Databricks, Stream Analytics, SQL DW, COSMOS DB, Analysis Services, Azure Functions	Application and Interview
Experience in in data modeling, ETL (extract, transform, load) processes, and SQL-based analytics	Application and Interview
Experience of building and optimising 'big data' data pipelines, architectures, and data sets	Application and Interview
Knowledge of the local government or comparable public sector environment.	Application and Interview

Proven experience in working effectively with a diverse range of stakeholders, including elected members.	Application and Interview
Proven knowledge of the regulatory framework surrounding people data and expertise in data protection for handling, storage, and reporting.	Application and Interview
EDUCATION/QUALIFICATIONS	
Degree in a related subject area is desirable.	Application
SKILLS AND ABILITIES: ESSENTIAL	
Strong experience of Microsoft Azure services and other tools to build data pipelines to collectively bring together data	Application and Test
Strong Python and Spark-SQL skills to assure that data is cleansed, mapped, transformed and optimised for storage and use according to business and technical requirements	Application and Test
Experience of loading transformed data into storage and reporting structures in destinations including data warehouse, high speed indexes, real-time reporting systems and analytics applications.	Application and Interview
Excellent negotiation skills and the ability to influence decisions and processes that affect Newham.	Application and Interview
Excellent communication skills to engage with directors and senior managers to gain an understanding of the current and future requirements of performance reporting.	Application and Interview
PERSONAL STYLE AND BEHAVIOUR:	
Ability to communicate complex data and models to senior management and elected members to effect change across the organisation.	Application and Interview
Strong organisational ability, including a capacity to work both independently and as part of a small team.	Application and Interview
Ability to be flexible, adaptable, proactive and to display leadership, initiative and good judgement.	Application and Interview
Ability to challenge current practices and drive service	

improvement through the effective analysis and presentation of data to key stakeholders.	Application and Interview
OTHER SPECIAL REQUIREMENTS: This post is subject to an enhanced DBS check	Satisfactory clearance at conditional offer stage