



Job Description

Post Title: Data Engineer

Directorate: Transport for West Midlands, Digital & Data

Reports to: Data Architect

Direct Reports: 0

Key Relationships: Digital & Data, West Midlands Local Authorities, Strategy, Innovation & Net Zero

Role Purpose

WMCA is committed to building a healthier, happier, better connected and more prosperous West Midlands. This is our vision. Our Values are central to how we work and interact with our wider partners and stakeholders. We encourage our colleagues to

Be **Collaborative**, Be **Innovative**, Be **Driven** and Be **Inclusive**.

The role will be responsible for working on projects in the Data team area of Digital and Data. You will develop technical solutions for Digital and Data and its external partners including central government, partner organisations and local authorities.

You will assist in developing and delivering data projects that support data analysis, dashboard reporting, data innovation and the wider use of data across the WMCA. You will specialise in designing and delivering data pipeline solutions which enable the sourcing and management of data. You will follow the data architecture and utilise the latest innovations in web-based data services. Using advanced extract, transform and load (ETL) techniques to model, manipulate and quality check data to ensure trustworthiness, standardisation, timeliness and support of new solutions. You will engage with users internally, with external stakeholders and partner organisations.

You will be agile, able to work at pace to respond to changing situations to produce analyses within tight deadlines.

Responsibilities

- Design and develop Extract, Transform and Load (ETL) pipeline processes to automate the access to source data, quality check and increase the usage.
- Assist with the development of new data analysis and reporting systems .

- Develop Dimensional Data Models using various frameworks.
- To analyse various datasets, seeking to correlate and integrate these with other secondary and primary data sources in order to generate insight.
- To identify and obtain key data sets that will add enhance insight
- Assist development and maintenance of the data platform, tools and data library
- Model, map and document data and processes from source through to utilisation within business processes.
- Assist with the operation and maintenance of data portals to enable data access for users whilst supporting data licensing and GDPR compliance.
- Respond efficiently to requests for intelligence from colleagues, partners and stakeholders as appropriate.

Person Specification

<i>Please specify (X) whether the experience required is Essential (E) or Desirable (D)</i>			Assessment Method		
Experience	E	D	App*	Int**	Other***
Extensive working experience using Azure Synapse Analytics and Azure Data Factory	X		x	X	
Experience using GIS in a commercial or public sector environment and building mapping-based data analysis solutions	X		x	X	
Programming and scripting experience (e.g. FME, Python, DAX, JavaScript etc) to extract, transform and manage data.	X		x	X	
Experience of data capture, analysis and management of complex datasets across a variety of applications from a variety of sources (API's etc.).	X		x	X	
Experience of collecting and validating intelligence, assessing the credibility of information and reliability of sources	X		x	X	
Extensive experience using the Microsoft business intelligence stack e.g. Power Platform, SQL Server, SSAS, SSRS etc.	X		x	X	
Practical experience working on Azure including CI/CD, automation, configuration, and design		X	x	X	
Experience working in an agile environment	X		x	X	
Skills/Knowledge/Abilities	E	D	App*	Int**	Other***
Detailed understanding of underlying database technologies (SQL Server) including SQL syntax and queries	X		x	X	
Knowledge of networking, VPN, troubleshooting, firewalls, network configuration & management		X	x	X	

DAX programming skills: ability to construct new data models, and create complex measures to deliver valuable insight	X		x	X	
High level of accuracy and attention to detail	X		x	X	
Demonstrate legal understanding of data licensing	X		x	X	
Knowledge of the relevant Acts of Parliament and related legislation for data protection	X		x	X	
Strong analytical and problem-solving skills, with the ability to analyse data, determine data quality and apply the findings using and developing PC based analysis and graphics software	X		x	X	
Excellent communication and interpersonal skills to interact with internal and external partners in a diplomatic and professional manner	X		x	X	
Excellent verbal, presentational and report writing skills, utilising multiple channels including desktop and web based tools and comfortable communicating with a wide range of audiences	X		x	X	
Ability to determine and develop appropriate data visualisation to communicate data meaning effectively and efficiently	X		x	X	
Knowledge of performance information methodologies/statistical techniques		X	x	X	
Evidence of working as a member of a team to ensure shared goals are achieved	X		x	X	
Ability to prioritise own workload effectively, prioritising and working to tight deadlines	X		x	X	
Qualifications/ Professional Memberships	E	D	App	Int	Other
Educated to Degree level or equivalent.	X		X	X	
Membership of a professional body		X	X	x	

* Application

** Interview

*** Details will be shared at interview stage

Core Expectations

Our culture is underpinned by what we do and how we do it. Our behaviours outline the ways we need to work to deliver success, become truly inclusive, and make the organisation somewhere where everyone can give their best contribution.

Value	Competency	Behaviour
Collaborative	Team Focused	Works as part of team, managing and leading.
	Service Driven	Customer, resident and partner focussed.
Driven	Empowered & Accountable	Takes ownership and leads when needed.

	Performance Focused	Ambitious and going the extra mile.
Inclusive	'One Organisation' Mindset	Believe in each other's expertise.
	Open & Honest	We do what we say we are going to do.
Innovative	Forward Thinking	Embrace change and open to new possibilities.
	Problem Solving	Go for clear and simple whenever possible.

Health and Safety

All employees have a duty to take reasonable care for the health and safety of themselves and of other persons who may be affected by their acts or omissions at work; and co-operate with their employer so far as is necessary to enable it to successfully discharge its own responsibilities in relation to health and safety.

Equality and Diversity

To promote and champion equality and diversity in all aspects of the role

Learning and Development

To participate in and take responsibility of any learning and development required to carry out this role effectively.

Performance Management

To actively engage in the performance management process and take responsibility for managing performance outcomes.

GDPR (General Data Protection Regulation)

To ensure the reasonable and proportionate protection, processing, sharing and storing of WMCA information in accordance with the relevant legislation, corporate policies, and in the best interests of the data subjects (Data Protection/GDPR), the WMCA, our partners, and the West Midlands, in all aspects of the role.

Other

There may be a requirement to work outside normal office hours on occasion to meet work deadlines, give presentations, attend meetings etc., including a requirement to work within stakeholder and partner offices within the WMCA Constituent area on a regular basis