



National Audit Office

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Digital Services: Data Analytics Developer

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Job title and main details
<ul style="list-style-type: none"> • Digital Services: Data Analytics Developer • 2 year fixed-term contract • Salary: £53,893 - £65,500 • Located at London, Victoria
Main purpose of the job:
<p>Digital Services – Azure Data Analytics:</p> <p>The Digital Services team within Corporate Services provides support for and the development of several Data Analytics solutions based on-premises and within Azure. It is the intention to migrate all Data Analytics solutions to Azure at the earliest opportunity.</p> <p>These solutions utilise or will utilise the Azure data analytics stack including products such as Azure Data Factory, Azure Databricks, Blob Storage, Azure Analysis Services and Azure SQL DB. Azure-based solutions are intended to be scalable and support “Big Data” scale engineering and analysis.</p> <p>On-premises solutions use the Microsoft SQL Server BI stack including SQL Server Enterprise, Reporting Services (SSRS), Analysis services (SSAS), SQL Server Integration Services (SSIS), and present data via Tableau Server and Excel.</p> <p>Data Analytics Developer:</p> <p>In this development role, the Data Analytics developer is responsible for the timely delivery of data analytics technical artefacts that meet the business objectives of the NAO, according to the relevant Sprint Plan and Project deadlines.</p> <p>The Data Analytics Developer develops and maintains the organization’s front-line Data Analytics platforms (AIMS & Data Service) for the purposes of Financial Audit and Value for Money outputs and the Enterprise Data Warehouse and Business Intelligence solution (NAOBI) for the purposes of Enterprise Reporting and back-office Analysis.</p> <p>The Data Analytics Developer is expected to work under the Azure Data Architect helping to design and deliver the optimal Data Analytics solutions required by the business. They are also expected to collaborate alongside the other teams within Digital Services (Infrastructure Operations, Service Operations & Digital Assurance, Salesforce & Integration, Digital Audit, Content & Collaboration) both operationally and for cross-departmental projects.</p>
Responsibilities/Relationships:
<p>Reporting to: Cloud Architect, Digital Services</p> <p>Internal/External relationships:</p> <p>Internal: Staff at all levels, including Digital Services colleagues, internal customers and business sponsors.</p> <p>External: Liaison with appropriate external support organisations. Consultants for specific projects.</p> <p>Staff Resources managed:</p> <p>None.</p>

Budgetary Resources managed:

None.

Objectives**Data Analytics Delivery (60%)**

- Implement Data Analytics solutions, initially On Premises and (increasingly) within Azure.
- Build and maintain:
 - A mixture of T-SQL stored procedures, SSIS ETL packages, Azure ADF Pipelines & Azure Databricks Notebooks to extract and transform data from line of business applications.
 - SQL Server Data Warehouses, associated Analysis Services OLAP cubes and Tabular Models.
 - Reports using Reporting Services.
 - Self-Service BI Toolsets such as Tableau Server Data Sources.
 - Support the Business with Dashboard creation activities using Tableau Desktop.
- Provide input on issues and solve programming challenges by participating in database engineering activities.

Business Analysis (15%)

- Collaborate with Business Architects and Analysts to gather and analyse business requirements, objectives and desired features for the NAO BI platform.

SQL Server & Azure Data Analytics Support (15%)

- Deliver support on Infrastructure issues and solve Database Administration challenges, by participating in database administration activities.
- Work with the DS Operations team to ensure that the NAO SQL Server estate (on-premises) and Azure Infrastructure is available in accordance with agreed service levels and operates within agreed capacity and performance levels
- To provide 3rd line support for fault diagnosis and fixing data analytics services incidents and problems ensuring an effective service is provided in accordance with agreed service levels.
- Working with other IT staff and external suppliers to troubleshoot database errors and where appropriate to apply patches.
- Proactive monitoring and reporting on the performance of the production environments.
- Working with the Infrastructure team to ensure high availability, backup and recovery of production databases, including regular testing of continuity processes.
- Helping to managing physical, virtual, clustered and load-balanced environments
- Performing user and security level administration tasks, including creating and maintaining users and assigning them appropriate privilege, managing the SQL Server estate's interaction with Azure Active Directory and with hosted applications.
- Automation of routine administration tasks, including the provision and maintenance of scripted tasks.
- To interface with end-users, support groups and third-party suppliers on problems & technical concerns.

- Provide and maintain supporting documentation and relevant procedures to ensure that others within the Cloud & Mobility team can manage the environment during periods of absence.
- To ensure an effective support and maintenance service is provided to the end-users and sponsors of the NAO's Data Analytics environments;
- To work with the internal DS Operations team to ensure adequate capacity, availability and performance of the NAO's Data Analytics environments.

Project Planning (5%)

- Analyse and estimate feasibility, time, and efforts for the technical aspects of a solution in order to contribute to Digital Services' resource and project planning.

Data Analytics Architecture (5%)

- Assist in the production of Data Analytics solution design & architecture documents.
- Assist in defining standards and best practices for data architecture and related technologies from an enterprise perspective.

Key skills/experience/knowledge required:

- Previous proven experience of developing on-premises Corporate BI using the classic Microsoft BI stack.
- Knowledge of relational database technologies and concepts, in particular SQL Server & T-SQL is essential.
- Communication skills in dealing with a range of customers, clear abilities to recognize and respond to business issues and priorities is essential.
- Strong analytical skills, good problem solving is essential.
- Knowledge of classic Microsoft Business Intelligence Tools - SSIS, SSAS (MDX & DAX), SSRS is highly desirable.
- Experience creating Dashboards with Tableau Desktop or another BI visualisation tool is highly desirable.
- Ability to learn and develop cloud-based data analytics development skills rapidly and effectively is important.
- An understanding (but not expertise) of Dimensional data modelling (Kimball) is required.
- Previous exposure to working using Agile methodology would be highly desirable, in particular using Azure DevOps to manage personal workload.
- Previous Exposure to Azure-based Data Analytics technologies, such as Azure Data Factory, Azure Databricks, would be an added benefit.
- Existing Exposure to managing Azure Cloud Infrastructure through the Azure Portal, ARM or Terraform would be an added benefit.