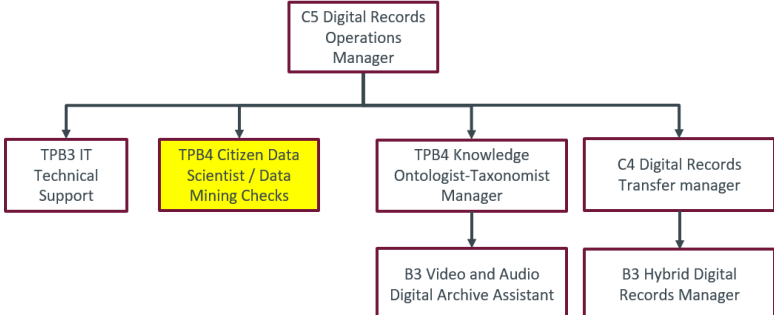




Role Profile

Role Title	Citizen Data Scientist		
Business group and team	Sensitivity Review Service, Digital & Innovation Office		
Job Purpose Overview	<p>The Sensitivity Review Service is responsible for the selection of Government records for permanent preservation, and sensitivity review to determine whether they should be released, or withheld under Freedom of Information Act (FOIA) and Public Record Act (PRA) exemptions.</p> <p>We have developed a digital capability to enable the sensitivity review of digital-borne records; a capability that requires an evolving technology environment to address the increasing volume and variety of digital record types.</p> <p>This Citizen Data Scientist role is key for the day to day operational management of sensitivity reviewed digital material before the records are transferred to The National Archives. This role will use algorithms, methods and systems to extract knowledge and insights from structured and unstructured data. The role holder will apply advanced / in-depth analytics to help optimise business outcomes</p> <p>You will curate digital data and information from various sources. You will analyse this material in order to understand any unforeseen consequences of the data being manipulated in the external environment. This will help us make informed decisions about our reviewed output. Digital Sensitivity Review is delivered as a managed service for a growing number of government customers. You will therefore have a service-oriented mind-set in establishing and delivering effective electronic records management for the Service.</p> <p>The role is based at Hanslope Park. Some travel to London may occasionally be required for visits to The National Archive or other stakeholders.</p>		
Organisational position	<p><i>Insert organisational chart or give brief description of where the role sits in the organisation. (To comply with our security rules, only provide the name of the job).</i></p>  <pre> graph TD C5[C5 Digital Records Operations Manager] --> TPB3[TPB3 IT Technical Support] C5 --> TPB4_CDS[TPB4 Citizen Data Scientist / Data Mining Checks] C5 --> TPB4_KT[TPB4 Knowledge Ontologist-Taxonomist Manager] C5 --> C4[C4 Digital Records Transfer manager] TPB4_KT --> B3_VA[B3 Video and Audio Digital Archive Assistant] C4 --> B3_HDRM[B3 Hybrid Digital Records Manager] </pre>		
Date Updated	8 June 2021		Updated By JG
Current / Applied Grade	TPB4	Job evaluation date	Confirmed grade 9.7.21
Level of Security Clearance	SC DV	DV	

JOB RESPONSIBILITIES

Main responsibilities

Operational

- As the sole data scientist in the team, you own the responsibility of surfacing unpredicted sensitivities and associations only possible through digital analysis;
- You are responsible for the Digital Sensitivity Review data experiments and new analysis capability which includes using your judgement in identifying the specific business needs, determining the best tools, data and techniques to address it, execute analysis, ongoing deliverables;
- You will explore and visualise the data to present the 'story' of data in a meaningful way, sharing key findings and utilising interactive visualisation techniques effectively with a range of technical and non-technical stakeholders;
- You must take the initiative, identify and respond to business service requirements, managing workload effectively to ensure all record release deadlines are met;
- Keep abreast of Data Science wider landscape and emerging technologies across Government and industry in order to help make FCDO Services a leader in Digital Sensitivity Review;
- Understand the ethical considerations of potential data science approaches, and the legislation applicable in this area. Aware of existing Government and other frameworks, and ensure work adheres to key privacy, security and data protection principles.

Problem Solving

- Use an evolving range of data analysis tools and techniques, including open source, some of which must be learnt quickly, as and when required;
- Develop rapid prototypes of data-driven tools that test hypotheses with team and other stakeholders. Continuously seek to expand a range of technical skills in order to identify hidden sensitivities;
- Embrace change and the digital sensitivity review challenge through all stages of system development and to regularly review procedures with the DSR team to identify improvements and simplify processes and decision making;
- Identify, monitor, maintain a view of and exploit emerging technologies which are applicable to, and could be deployed into, the FCDO Services DSR environment;
- Actively encourage ideas from a wide range of sources and stakeholders and use these to inform your own thinking. Be willing to meet the challenges of difficult or complex changes;
- Able to identify problems and effective risk reduction before datasets are released to The National Archives;

Decision making

- Identify a broad range of relevant and credible information sources and recognise the need to collect new data when necessary from internal and external sources;
- Recognise patterns and trends in a wide range of evidence/ data and draw key conclusions, outlining costs, benefits, risks and potential responses;
- Use algorithms, methods and systems to extract knowledge and insights from structured and unstructured data and apply advanced / in-depth analytics to help optimise senior management decision-making / business outcomes.
- Ensure all government and public data and information is treated with care in accordance with security procedures and protocols;
- Understand and identify sensitivities, analyse and help to identify the appropriate solution;
- Able to classify and prioritise problems, document their causes and implement remedies;
- Initiate and monitor actions to investigate patterns and trends to resolve problems, including consulting critical stakeholders, specialists and researching solutions where required;
- Determine appropriate remedies, creating new work methods to provide continuous performance improvement and assists with implementation of it as well as preventative measures.

Contacts & Communication

- Work with Head of Digital Sensitivity Review and project team members to set priorities, create clear plans and manage all work to meet the needs of the customer and the business;
- Work closely with the Digital Records Manager, Knowledge Information Manager and the Senior Sensitivity Reviewer within the Sensitivity Review team to provide technical insight and better risk management and mitigation. Develop and document requirements including supporting verification and functional test of systems and solutions;
- Ensure a strong and mutually beneficial collaboration with our third party supplier is created through successful coordination and cooperation in line with ISO 44001 standards;
- Invest time to generate a genuine team spirit with the third party collaboration team;
- Engage locally with the wider FCDO Services community and exploit wider developments from the organisation within the DSR activity, and conversely seek to exploit the innovations developed for the DSR solution across FCDO Services and other Government departments to maximise investment;
- Stakeholder liaison with the FCDO and other wider Government Departments as required;
- Responsible for shaping and contributing towards the establishment of collaboration with The National Archives and the Cabinet Office with regard to Digital Sensitivity Review and records transfer;
- Lead the “advance party” to engage with other Government departments to ascertain their needs to determine if opportunities exist for exploitation and/or mutual exchanges of information, in particular where such departments wish to only exchange information on a department to department basis;
- Actively seek input from a diverse range of people through engagement with academic organisations, trade bodies e.g. TechUK and other public sector focussed Innovation Forums such as the HMG Defence and Security Accelerator to identify opportunities;
- Support the preparation and deployment of technical training in the operation of the service for our sensitivity review team members;
- Support and enable the preparation of business relevant metrics from the digital service provided for DSR.

KNOWLEDGE AND KEY SKILLS

Knowledge required in the Government Analysis Career Framework for the role of Data Scientist can be found at:

<https://www.gov.uk/government/publications/analysis-function-career-framework>

Skill	Skill level
Programming and build (data science)*	Practitioner
Data Science innovation*	Practitioner
Applied maths, statistics and scientific practices*	Practitioner/ Working
Ethics and privacy*	Practitioner
Developing data science capability	Practitioner/ Working
Delivering business impact	Practitioner/ Working
Data engineering and manipulation	Practitioner
Understanding product delivery across the life cycle (data science)	Practitioner/ Working

Qualifications:

- Educated to degree level in either computer science, data science, engineering, mathematics or statistics.

Essential Skills:

- Excellent analytical and problem-solving skills;
- Proven examples of previous successful data science projects;
- Experience of developing solutions to new and unfamiliar problems;
- Experience of communicating technical material to an audience that may not understand data science;
- Excellent planning, time management and organisational skills;
- Excellent attention to detail;
- Experience of communicating with and influencing multiple stakeholders;
- Experience of successfully managing projects.

Knowledge

- Detailed knowledge of data science techniques and concepts in order to discover information hidden in vast amounts of data, to help us make informed decisions to deliver better output. You will recommend, procure and apply data mining techniques and software, performing statistical analysis, and building high quality prediction to inform and mitigate systemic and tactical risk;
- Provide curation of digital data and information from various sources and analyse it for better understanding about how the data could be interpreted in the external environment;
- You will have practical experience of software packages, programming languages, data mining techniques and methods used in data science and visualisation, such as R, SQL, Python, NumPy, MatLab and scripting development;
- Experienced in structured data collection, data cleansing and analytical tools such as PowerBI or Tableau;
- You will be able to perform ad-hoc analysis and communicate the results using written and presentational results;
- You may have experience in using query languages such as SQL and experience with database environments;
- You will be familiar with the use and application of machine learning techniques and technologies;
- Excellent written technical documentation and verbal communication skills with the ability to communicate clearly at all user levels (internal and external customers);
- Must be eligible for DV and Strap clearance.

Desirable:

- A working knowledge of the Public Records and Data Protection Act, Freedom of Information Act, Information Commissioner's Office (ICO) guidance;
- A background in mathematics and statistics, especially when building or managing databases to assist with data modelling;
- Experience of working in a multidiscipline team of people to deliver successful outcomes;
- Experience of auditing and checking work;
- Experience of networking in the data science community;
- Experience of developing Data Science business opportunities;
- Experience in working within a secure environment
- A strong engineering mind-set, being familiar with engineering and/or technology development methodologies.

CORE BEHAVIOURS

- *Top three for job:*
- Managing a quality service
- Changing and Improving

- Making effective decisions

CRITICAL SUCCESS FACTORS

Success measured and evidenced by:

- High quality service delivery; digital records sensitivity reviewed and transferred to TNA in line with stakeholder programme requirement;
- All sensitive information hidden in vast amounts of data is detected and brought to the teams attention before release to The National Archives;
- High quality prediction provided to inform and mitigate systemic and tactical risks in order to avoid security incidents;
- Mosaicking possibilities minimised;
- Management Information provided to FCDO Services senior management;

Budget Responsibility?	If YES, how much:	If NO can they authorise payments?
No	£ per annum	Yes
Reports to: (Role Title and Grade)	C5 Digital Records Operations Manager	
Direct Reports: (Number and grades of staff)	N/A	