AI for government Hackathon

Use Cases for hack teams

“The development of AI is as fundamental as the creation of the microprocessor, the personal computer, the Internet, and the mobile phone. Entire industries will reorient around it. Businesses will distinguish themselves by how well they use it.”

Bill Gates

Our use cases: What are the challenges we want to solve?

"AI is one of this government's five technologies of tomorrow – bringing stronger growth, better jobs, and bold new discoveries. It is a vision that has been shaped by stakeholders and experts in AI, whose expertise and ideas I am determined to see reflected in our department."

The Rt Hon Michelle Donelan MP
Secretary of State for Science, Innovation and Technology[1]

[1]A pro-innovation approach to AI regulation Updated 3 August 2023

The 6 use cases that the hack teams have to choose from

Quality of service in policing

Ministerial correspondence

Flood modelling / flood response

Skills progression and tailored development plans

Commercial best practice

Customer call efficiency

Quality of Service in Policing

Description / Overview

Key policy: 20'000 extra police officers. Big concern around the ongoing support to young in-service officers and how this is impacting quality of service. **Could a LLM to sit across key legislation, codes of practice and policy to enable officers to have the information at their fingertips** to make better decisions and improve outcomes.

How do we democratise this access so no matter where an officer is and what device they are using they can receive trusted advice and guidance maybe including bi-direction chat to dive deeper and asking additional questions?

Suggested Data Sets

Authorised Professional Practice

APP (authorised professional practice) | College of Policing

PACE

Police and Criminal Evidence Act 1984 (legislation.gov.uk)

IOPC

Publications Library | Independent Office for Police Conduct (IOPC)

HMICFRS

A number of reports get published here with learnings from inspections not just the PEEL reports Publications - His Majesty's Inspectorate of Constabulary and Fire & Rescue Services (justiceinspectorates.gov.uk)

General legislation

Legislation.gov.uk

NPCC

General publications are listed here under the drop downs: All publications (npcc.police.uk) Sets national standards for policing

CPIA

Criminal Procedure and Investigations Act 1996 (legislation.gov.uk)

Ministerial Correspondence

Description / Overview

Ministerial Private Offices receive a **huge quantity of wide-ranging correspondence** from citizens, businesses, Parliamentarians, interest groups, and other stakeholders.

Managing Ministerial correspondence is a vital task for departments. It involves receiving, categorizing, prioritizing, and responding to incoming correspondence on behalf of ministers. The handling of ministerial correspondence is **guided by established protocols and guidelines**. Could a **Generative AI tool automate triaging of correspondence**, **suggest responses** based on departmental policies, detect trends around policy themes and concerns, and automate flagging of threats/vulnerabilities etc?

Suggested Data Sets

National archives **(Various examples below)**

UK Parliament Website

Guidance

Guide to Handling Correspondence

Institute for Government

Data Room

Flood Modelling / Flood Response

Description / Overview

Flooding is one of the most **serious natural hazards in the UK**, affecting millions of people and causing billions of pounds of damage.

Could GenAI analysis of historical weather data, river levels, soil moisture, and other relevant variables **create predictive models for flood events**, identifying patterns and trends that may indicate the likelihood of flooding, **enabling authorities to issue early warnings**. Could **simulated scenarios** based on factors such as rainfall intensity, river flow rates, and terrain characteristics **help planners understand potential flood impacts**, identify vulnerable areas, and develop effective response strategies? Could GenAI help understand the **commercial impact, reviewing types of businesses within areas of risk**, what the industries are, their revenues, employment strategies and where they may need commercial grants to improve infrastructure?

Suggested Data Sets

Environment Agency Data Sets **(Various examples below)**

Flood Risk Areas (Various)

Flood map for planning - flood storage areas

Historic Flood Map

Recorded Flood Outlines

Met Office data sets **(Various examples below)**

Winter Precipitation Change - Projections (12km)

Monthly Precipitation Observations 1991-2020

Exploratory Extended Time-mean Sea Level Projections to 2300 (cm)

UK Centre for Ecology and Hydrology **(Various)**

Environmental Information Data Centre

Skills Progression & Tailored Development

Description / Overview

GenAI has the potential to offer valuable support in the **career development of civil servants**.

Could GenAI provide a **targeted and personalised training and development plan** aimed at addressing any identified skill gaps, or desired career pathway? And integrate into the flow of work? Can this help individuals make more informed decisions about their career paths, and empower them to take control of their professional futures, using the many defined skills pathways within the civil service.

Could GenAI provide access to a curated/recommended **source of expert learning** at the point of need, for Digital and Data Experts.

Could Gen AI **enhance existing skills matching tools** providing dedicated advice for new joiners looking to enter the Civil Service? Or existing civil servants looking at a career or role move?

Preferably this will **build-on/augment existing core systems such as Civil Service Learning and Microsoft Teams**.

Suggested Data Sets

Civil Service Careers
Civil service professions

Civil Service professional frameworks
Digital, Data and Technology Profession Capability Framework
Civil service professions
Career Frameworks - Civil Service

Role Profiles in various professions (Examples do not include all professions)
Analysis role profiles (Various)
DDAT role profiles

Capability Frameworks (Examples do not include all professions)
Project Delivery Capability Frameworks

Civil Service Competency Framework
Competency Framework
Success Profiles

Civil Service Fast Stream
Fast Stream Schemes

Civil Service Jobs
Civil Service Jobs Website (Role profiles, etc.)

Commercial best practice

Description / Overview

Across the Public Sector, there is a **large total departmental expenditure** from a buying a box of paperclips through to a warship. This means that everyday hundreds of new contracts are being drafted and agreed.
Although we have **Public Contract Regulations, standardised base contracts, procurement policy notes**, and large amounts of guidance, commercial and procurement officers often have to make judgement calls given the specific situation. Even with the size and scale of the Government Commercial Function and the Government Commercial Organisation, often this cannot provide leverage to cover the whole of the Public Sector to promote commercial best practice. Could AI, attuned to commercial language, **offer commercial and procurement officers and professionals' deep insight into what is going across the Public Sector; highlighting commonalities and opportunities for collaboration, and bring together commercial best practice that should be applied?**

Suggested Data Sets

Public procurement policy

Public procurement policy

CCS Procurement Frameworks

CCS Procurement Frameworks

Procurement Policy Notes

Procurement Policy Notes

Contracts Finder

Contracts Finder

Find a Tender Service

Find a Tender Service

Public Contract Regulations

Public Contract Regulations

Transforming Public Procurement

Transforming Public Procurement

Customer Call Efficiency

Description / Overview

Millions of taxpayers contact HMRC annually for various reasons, and our challenge is to r**evolutionize the way these calls are handled**, ensuring accuracy, efficiency, and linguistic diversity. Can generative AI accurately automate the call **summarization process**, **detect protocol adherence**, and provide **sentiment analysis** and quality assurance checks.

Can the above be provide in **languages other than English**? For example, **can GenAI achieve 100% accuracy in translating calls to Welsh**, while maintaining the form layout and linguistic nuances.”

Suggested Data Sets

Exemplar Transcript

See data team

Thank you