

Providing digital technology services to DWP

**Our Services** Bringing digital to life

# **Data & Analytics**

### **Our Purpose**

### Using data driven intelligence to deliver digital services efficiently

Working with other experts at DWP Digital we're reshaping the digital landscape of UK government. Our people, our biggest asset, use their expertise to help build secure and intuitive digital services used by million of UK citizens.

Our aim is to help DWP accelerate data-driven decision making. We're doing this by establishing a centre of excellence for Data and Analytics to become a partner of choice.

We use cutting-edge data engineering, science and visualization techniques and a full range of innovative technologies to uncover relationships, test hypothesis, experiment, iterate and innovate at pace.



## **Our Customer**

### Harnessing the potential of people and technology

With other experts across DWP Digital, we work together in multi-disciplinary teams to achieve shared goals. This unique relationship means:

- we've a detailed knowledge and understanding of DWP's technology estate that is unrivalled in the market
- we understand and work seamlessly with DWP's business processes, heads of roles and Data & Analytics practices
- we can make long-term investments to build our Data & Analytics community's capabilities and services they offer
- our peoples expertise is valued and we're seen and treated as a trusted partner at DWP Digital – increasingly taking on new, more complex and valuable things to do
- we have the agility of a small lean organisation, are able to respond quickly to external changes, deliver value for our customer and stay ahead of the game.



# **Our People**

### Ensuring digital services operate, supporting citizens, around the clock

Based in vibrant digital hubs across the country, we're embracing agile ways of working to ensure what we deliver meets and exceeds our customer's needs.

Our people want and need to keep up with fast paced changes in digital technology to be masters of their craft. An excellent range of learning and development is available to tap into, which helps our people to build their skills and develop their careers.

Every one of our people is different. We care about what's going in their lives and want to help them be happy and healthy, both at and away from work. We value people for their differences and will do everything we can to create a positive, safe and healthy environment for everyone to be themselves.

We believe in celebrating successes together, and recognising and rewarding our people for their creativity and commitment.





Our team of experts work tirelessly to ensure DWP's digital services deliver excellent experiences for citizens and colleagues.

## **Our Services**

We using data driven intelligence to deliver digital services that pay billions of pounds to citizens each year

### Over the coming year our focus will be to grow the following as-a-service areas:

- Data Professionals as a Service
- Data Teams as a Service
- Data as Product as a Service
- Data-Driven Products as a Service

### The initial focus will be on best-in-class services associated with:

- Data Engineering
- Data Science
- Data Management
- Data Visualisation
- Performance Management
- Data Governance
- Data Strategy

#### Data Engineering

Focusing on practical applications of data collection and analysis and ensuring there are the right mechanisms for collecting and validating that information, which work for real-world operations.

Covering the harvesting of data and generation of meta-data in batch or real-time, small and big data, metadata management, refactoring and reengineering legacy processes, analysis and experimental design for pipeline enhancement and development.

Engineering skills are central to ensuring that the interfaces and mechanisms exist for the flow and access of information and that effective practical engineering tasks are built for functioning systems.

#### Data Science

Focusing on the interrogation of data to discover insight and build products, Data Science is a multi-disciplinary blend of Computational Statistics, Program & System development skills, and Domain knowledge. Great Data Science happens at the intersection of these skills.

Data-driven Insight is central to providing strategic guidance and Data Scientists act as consultants, guiding business stakeholders on how to act on findings, data-driven Products are technical assets, with functionality which integrates algorithmic processing of data based on robust statistical methods to deliver an action, and are integrated into applications.

A thorough understanding of Users' needs, how to evaluate change and how to build for real-world operations are central skills for both Data Science Insights & Products.

### **Our Services**

We support services used by thousands of DWP employees every day

#### Data Management

Focusing on Structured and Unstructured Data, Reference and Master Data, Data Integration and Data Interoperability, Data Management is a highly complex and fastmoving service aimed at optimising raw data management and processing as a foundational support for all Data & Analytics services and activities.

Building successful information systems and designing data-intensive applications within a broader architectural and governance framework require clarity on the definition and management of data and information critical to the organisation, single points of reference and authoritative sourcing.

Delivering these to the Users and Applications using appropriate tooling, technologies and frameworks is central to great Data Management.

#### Focusing on representing data in a way which allows Customers and Users to rapidly digest information derived from data in a universally understood way. This includes understanding the lexicon of visualisation and when to use table, charts, graphs, or maps in order to allow that consistent interpretation and level of understanding.

Data Visualisation

User research and user experience are central to providing great Data Visualisations, whether for Insights in Business intelligence or as part of user journeys for Data Products, along with providing the context and supporting explanatory material which allows Customers and Users to really truly understand trends, outliers and patterns in their data and make consistent and wellinformed decisions.

#### Performance Management

Focusing on the Users' Journey Analytics and how to optimise User Journeys. Using data and meta-data derived from Customers' and Users' interactions with our Products, the Performance analyst define measurement frameworks and key performance indicators and measure the performance of the use of the product against these frameworks and measures, suggesting changes and helping define pilots to optimise, replaying this back the customers.

User Experience Research coupled with statistically valid hypothesis design are central to providing great Performance Management, bringing the best of Interaction experience analytics and Statistical analytics into a cohesive framework to understand and improve Customer and User experience.

## **Our Services**

We strive for success and are constantly looking for new ways to add more value for our customer

#### Data Governance

Focusing on availably, usage, consistency, integrity and security, Data Governance ensures that processes are established and adhered to which ensure the effective management of data across the organisation and ensure that ownership, accountably and responsibility for data quality are clearly identified and managed.

Along with ensuring that people, process and technology are available to deliver consistent and proper handling of the Customers data, central to the role is requirement of a clear understanding and advocacy of ethics, trust and societal needs, and the ability to bridge policy and law requirement with organisation and technical design in a stewardship capacity.

#### Data Strategy

Focusing on aligning the disciplines outlined to deliver a comprehensive vision and actionable foundation for our organisations' ability to leverage data-driven capability for the benefit of Customers and Users.

Great Data Strategy ensures that independent empowered teams work to deliver great data driven insights and data driven products that complement and enhance each other, where the Strategy forms guardrails how data is leveraged to meet the purpose from technical, architectural and governance perspectives and lines that those to a clear guiding vison and path.

Road-mapping and architectural design, along with conceptualisation, foresight and stewardship are central to providing great Data Strategy, ensuring it meets both current and future needs.



Our team maximises the value of data, delivering well-presented data solutions and producing actionable insights "Our ambition is to provide data and analytical services that enable DWP to make more informed and intelligence led decisions – to improve experiences of citizens using their services, reduce levels of error and fraud, and improve efficiency.

Using best practice data strategy, management and governance, and applying advanced analytical modelling techniques and tooling, we'll maximise the value of data, delivering wellpresented data solutions, producing actionable insights and servicing the data needs across a variety of stakeholders.

All of this will help DWP to inform and evaluate policy, improve operational delivery, keep citizen data safe and secure and improve DWP services"

#### **Andrew Bolton**

Data & Analytics Digital Service Practice Lead





### Contact

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