

AI-Enabled Workforce Planning



BAE SYSTEMS

We are Techmodal

A collaborative data consultancy, bringing the capability and creativity you need to unlock the strategic potential in your data.

As Defence and Government experts, we understand the unique complexity of your constraints. Adaptive, imaginative and iterative, we meet you where you are – and start with what you have.

We focus on making more of your existing tools and technology. Applying smart thinking and continuous improvement to uncover the insight in your data – and help you move past your stickiest problems. Optimising your investments, operations and outcomes. Maximising the impact of your resources towards a better future.

Our clients operate in high-stakes, highly technical and highly secure environments. The pace is fast; the demands are complex and the cost of getting decisions wrong is high. They need partners who bring clarity, precision and practical expertise – not complexity for its own sake.

Our value comes from combining deep analytical strength, applied technology expertise and hands-on consulting experience. We turn ambiguity into clarity and insight into action.

What we offer

We operate at the cutting edge of digital innovation and at the heart of organisations that keep vital infrastructure running, national security protected, and armed forces prepared. Our teams provide:

Decision advantage

We give organisations the insight to act with clarity and pace, ensuring choices made today hold up under tomorrow's pressure.

Our strength comes from being data-led, operationally aware and grounded in real-world context. We explore options, test scenarios and highlight trade-offs before action is taken, building confidence in complex and high-consequence environments.

Technology that works

We help organisations unlock the full value of their technology and existing investments. Our solutions are shaped to our clients' environments – secure, scalable and designed for reuse – delivering faster outcomes and greater value for money.

We stay user-driven, not technology-driven, ensuring what we build is usable, dependable and impactful.

Delivery impact

We work shoulder-to-shoulder with clients to turn ambition into results. Our approach is collaborative, adaptive and focused on rapid progress.

We build momentum early, provide clear answers before the conversation moves on and ensure delivery stays aligned to purpose. Whether defining strategy or supporting implementation, we bring clarity, structure and practical leadership.

Strength in secure and complex environments

All our work is delivered by security-cleared teams who understand the realities of Defence, national security and critical infrastructure.

We design and assure solutions that are resilient, secure and governed — engineered to work in environments where constraints are real and reliability matters.

Powered by BAE Systems Digital Intelligence

We combine the pace, creativity and agility of a specialist consultancy with the depth, reach and security of BAE Systems.

Clients benefit from a unique blend of niche expertise and enterprise-scale capability, with seamless access to Digital Intelligence, engineering, cyber and equipment programmes when required.

Service Overview

Bespoke personnel planning and analytics solutions for strategic and operational workforce planning, with extensive deployment in the UK Ministry of Defence.

We develop flexible, user-driven analytics and modelling solutions that leverage customer personnel, organisational and other data sources and integrate the results into Business As Usual processes.

Our approach follows Government Digital Services (GDS) Agile principles – we can deliver personnel-based outcomes across Discovery, Alpha, Beta and Live projects, led by the customer need. We leverage customer technologies wherever possible to maximise Value for Money and deliver high quality solutions rapidly.

Our Workforce Planning solutions solve some of the most difficult strategic and operational personnel challenges in UK Public Sector, including:

- Modelling for personnel demand & supply to understand short-and long-term requirements for skills, roles and job types, including scenario/What If modelling.
- Application of AI, Machine Learning and simulation approaches and technologies to model recruitment, training and retention pipelines, enabling organisation to model long-term workforce planning and voluntary outflow.

- Optimising assignment of personnel to roles and/or promotions, accounting for multiple hard and soft variables including location, career history, location preferences, performance, sentiment and job satisfaction.
- Analytics and visualisation of personnel data, surfacing data that is otherwise often hard to reach, to deliver trend and pattern analysis and aid strategic decision-making.
- Automation of personnel management workflows and business processes, including Career Management, Branch Management, recruitment and performance management.

Our solutions aid both strategic and operational decision-making, reduce burden on staff, and enable organisations to meet Government and Departmental commitments with an evidence-based and data-led approach.

We understand that data security and confidentiality is particularly important when dealing with personnel data. Our development approaches align to Secure by Design and NCSC principles for secure development including role-based data access control, multi factor authentication and audit logging. We can also apply necessary standards to ensure GDPR compliance. These standards ensure that data is protected and that system administrators can control access to specific subsets of the data for users. Our solution architecture also enables the aggregation and anonymisation of data, so that certain users have access to high level management information without being able to drill into individual details. Our solutions are deployable on customer infrastructure – on-premises and cloud, and we

Our experience includes:

- Techmodal-primed Navy Command People Transformation & Analytics (NCPTA) programme.
- Army Headquarters CASTLE programme for Personnel Transformation.
- MOD Defence Transformation (DT) programme, with analytics and visualisation on Military and Civilian personnel data.
- Royal Air Force (RAF) Strategic Workforce Planning (DRAKE) with Defence Digital and RAF Digital.
- RAF Astra programme chatbot development using personnel policy documentation.

Service Features

- Personnel data analysis for trends, insights and reporting.
- Personnel optimisation modelling for matching personnel to jobs/roles.
- Pattern analysis including use of Natural Language Processing (NLP).
- Agent Based Modelling and simulation for Strategic Workforce Planning
- Personnel demand & supply scenario modelling.
- Personnel workflow automation and optimisation.
- Applied Data Science approaches (AI/ML) for personnel position matching to roles, personnel, personnel analytics, and personnel demand & supply forecasting and modelling
- Flexible application development using full code and/or low code technologies, aligning to customer need and leveraging customer technologies.
- Extensive applied experience in UK Defence.

Service Benefits

- Reduced burden on Personnel & Career Management staff.
- Rapid scenario modelling to enable faster, data-driven decisions on personnel.
- Automation and digitisation of manual processes to save time, cost and resources.
- Flexible technology approaches to suit customer need and constraints.

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Contact: John Atkins
tenders@techmodal.com