

Cloud Cost Modelling



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

This service has been developed to enable organisations to understand the cost implications of strategic and operational decisions.

Our cost modelling service has developed an impressive reputation via implementation of proven methodologies, bespoke model design patterns and unique philosophy to produce effective and sustainable solutions. We are a trusted partner in delivering modelling expertise within the Cost Assurance and Analysis Service (CAAS) and in wider defence projects within the Ministry of Defence.

We begin by assessing the business requirements for the analysis and modelling. This involves determining the nature, scale and complexity of the model required through gathering relevant data and information from across the organisation. We work to fully understand the key business challenges by defining the approach, technique and output required. The model logic model is defined in sufficient detail to provide an unambiguous approach.

The business and logical architecture framework is then developed, accompanied by model prototypes, to ensure we deliver the most effective model structure. Once agreed, logic is embedded into a model to calculate the cost of varying inputs based upon different scenarios to support business decision making. Stringent adherence to the Flexible,

Appropriate, Structured, Transparent (FAST) modelling standards allows us to produce consistent, robust and structured models in line with industry standards.

Each model is put through a rigorous process of independent testing involving verification of the model's formulas and functionality as well as validation of the sources, accuracy and appropriateness of the input data. We therefore increase confidence in the model's results by identifying errors and inconsistencies and optimising model functionality and performance.

The models are used to answer required business questions by producing decision-making information in a clear and consistent output. This includes sensitivity and scenario analysis used to understand project drivers. Using methodologies such as Monte Carlo simulation, we incorporate project uncertainty and risk to provide forecast budget estimates, supporting multi-million-pound business cases and major transformation programmes.

We work with our customers' existing technology stacks wherever possible to maximise the pace of delivery, align with wider digital and data strategies and derive maximum value from existing investments. To support this, we are experts in using a range of COTS and open-source tools and platforms, ensuring we can bring the most effective solution to our customer's challenges.

Techmodal has repeated experience of developing and deploying modelling and analytics solutions on customer platforms, including on-premises infrastructure and cloud environments such as Amazon Web Service (AWS), Microsoft Azure and Oracle Cloud Infrastructure (OCI). Our work spans different classification levels and we have experience of MODCloud (AWS, Azure and Palantir Foundry), Army Hosting Environment (AHE) and Navy Digital environments.

Service Features

- FAST Standards: Flexible, Appropriate, Structured, Transparent
- Validated and Verified models and outputs
- Elegant and efficient
- Version controlled
- Strategic insight
- Stochastic analysis using Monte Carlo simulation
- Analysis of sensitivity to key assumptions and cost drivers
- "What-if" analysis and comparison of scenarios
- Development of robust, scalable, iterative modelling capability aligned to needs
- Open-source and COTS platforms and tools aligned to business need
- Compliant with ISO-9001 and Government Digital Services (GDS)

Service Benefits

- Enhancing business decisions through intelligent systems
- Enhancing business insight through data visualisation
- Improved awareness of cost driving factors
- Auditable Decision Basis
- Deep understanding of opportunities and risks
- HM Treasury Green Book compliant
- HM Treasury Aqua Book compliant
- Baseline for project control
- Informed stakeholder management
- Designed to support audit
- Flexible and dynamic models

End of document

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