Operational Research

Through our rigorous, tailored approach we deliver actionable insights to stakeholders to make confident, informed decisions
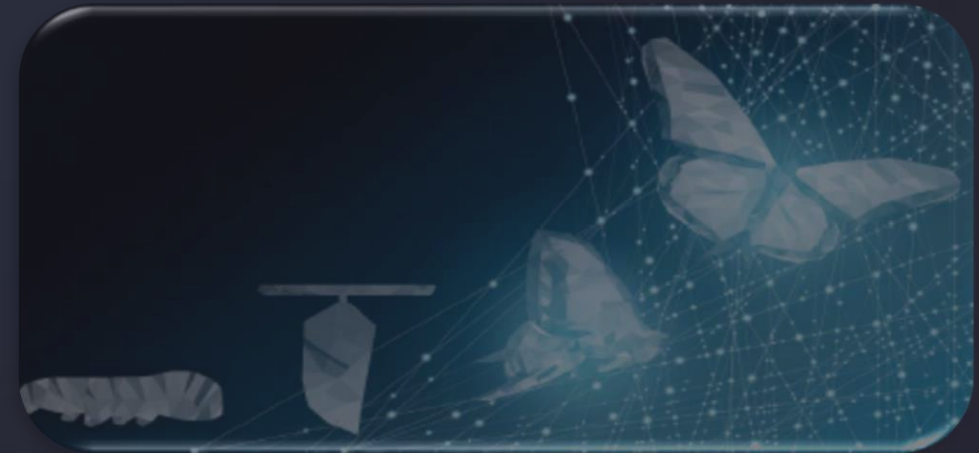
Service Definition

Bespoke operational support from problem elicitation, bespoke model development, scenario simulation and analysis, through to delivery of visually engaging outputs to senior stakeholders. We work collaboratively with you following an agile and problem-centric approach. We deliver quality-assured simulation tools, analysis results, and can aid development of your internal modelling capabilities.

Service Features

- Robust, repeatable approach, applying scientific rigour to generate evidence
- Tailored approach focused on the business challenge and specific problem
- Systems thinking approach to whole-system modelling
- Facilitated stakeholder workshops to collate tacit knowledge
- Collaborative approach working closely with our and your domain experts
- Model 'What-if' scenarios, optioneering, forecasting, uncertainty and confidence
- Analyse statistical patterns, correlations, anomalies and trends in data
- Applications include operational strategy, policies, workforce and whole-life cost
- Wide range of methods (e.g. agent-based, discrete-event, Bayesian, Monte-Carlo, machine-learning)
- Wide range of technologies (e.g. low/no-code, desktop, web-based, cloud)

Service Benefits

- Rigorous approaches manage highly complex and interconnected problems
- Quantitative evidence to support decision-making
- Right approach deployed underpinned by comprehensive knowledge of techniques
- Collaborative approach brings stakeholders along the journey
- Model uncertainty to identify robust solutions
- Agile approach handles emerging requirements, builds understanding and delivers quickly
- Visually engaging and interactive visualisations to win over stakeholders
- Rigorous assessment of uncertainty permits risk informed decision making
- Identify high-value, low-regret decisions early, leading to reduced risk profile
- Link decision-making to benefit realisation to demonstrate overall project value

Detailed Service Definition

We apply robust and repeatable techniques to handle the complexity of business and engineering problems. We take a problem-centric approach to design our technical solution, focusing on how our operational research will deliver improvements to your business. Our knowledge of a breadth of tools and techniques allows us to select the most appropriate for the task, balancing speed, flexibility, and cost effectiveness.

Detailed Service Definition

We start each project by working with stakeholders to develop and capture experts' understanding of the problem. We bolster this with analysis of available data to draw out both the objective and subjective shape of the problem.

We design our technical approach to meet stakeholder needs, balancing speed, flexibility and cost. We develop bespoke models from the ground-up and tailor existing or COTS models to solve the challenge as appropriate to the challenge. Our familiarity with a broad range of techniques spanning data analytics, modelling, computer simulation and artificial intelligence allows us to find the right tool for the job.

We consider the end consumer of the results from the outset with a focus on ensuring operational research outputs are easily digestible by the audience, enabling them to make confident and better informed decisions.

Why Frazer-Nash Consultancy?

We are an independent consultancy offering a broad range of cloud consultancy services. We have been at the leading edge of digital engineering and software development for over 35 years. We are 'solution agnostic' and provide truly independent advice. We are not tied to any hardware or software products; we design cloud-based solutions which are built on knowledge acquired from a broad range of applications developed across multiple platforms. We utilise this knowledge to add value to our clients through the technological advantages offered by cloud integration.

Our Commitment to Quality

From every aspect of engagement and communication we are committed to providing services and deliverables of the highest quality, to ensure we continually meet and exceed the expectations of our customers. Our processes include suitable controls to ensure progress is closely monitored and decisions are appropriately scrutinised.

In addition to a project manager, every project has a dedicated project supervisor (who impartially monitors and approves monthly progress reports) and dedicated project auditor (who ensures quality is followed). At a deliverable level, all customer outputs are verified for technical accuracy, and approved as appropriate for their purpose by two independent reviewers. Our Quality Management Systems is certified to ISO 9001 and the TickITplus scheme (for software development).

Our Security

Our processes and certification are fit to handle sensitive and classified information up to Top Secret. The majority of our staff are security cleared to at least SC and over 200 of our staff hold DV clearance. We are also experienced in handling highly sensitive commercial information, with the ability to separate teams as necessary for security and conflict of interest requirements. Our IT systems are certified to ISO 27001 and Cyber Essentials Plus.

Our Approach to Subcontracting

Our large base of full-time staff can be supplemented where required through partner companies and trusted associates providing us with flexibility and scale whilst retaining control. We are adept at quickly subcontracting a range of organisations when needed, from sole traders to large multinational companies, through the lifecycle of a project. Our processes focus on identifying, assessing and contracting an appropriate supplier; defining a scope of supply; flowing down terms and conditions where appropriate, and managing risk to ensure the purchase is delivered on-time, within budget and to the required quality. This includes undertaking a due-diligence process to commercially and technically 'approve' the suppliers we work with.

Resourcing

We employ over 1200 technical staff across all grades, from Follow to Set Strategy, with a vast range of specialities, backgrounds and experiences. To enable agile and flexible resourcing, we are grouped into a range of technical delivery areas (e.g. Information Systems, Cyber, Modelling, Software etc.), which can be applied to a range of sectors (e.g. Central and Local Government, Police, Health, Energy). This resource focus combines with our strong portfolio, programme and project management to allow us to monitor demand on a dynamic basis and respond to the changing demands of the project through its lifecycle.

Our staff work across a range of industry sectors allowing us to 'cross-pollinate' ideas and techniques between different domains. We build teams, led by a single responsible project manager, that are tailored to the specific challenge. We are fortunate to have a diverse range of capabilities within the same company, including information security, and human factors specialists. This allows us to efficiently and promptly deliver multi-disciplinary projects that meet your specific requirement.

Our Commercial Approach

Our commercial approach is flexible to provide best service and value to our clients.

We will discuss with you the specifics of the support and services you require and build an appropriate commercial model to deliver this scope. This could be a defined scope fixed priced service, or provision of time and materials agreed day rates suitable for a developing scope.

Where you have service requirements for an extended period, and where we have control of the resource flexibility, we are also able to offer an agreed single blended day rate for support at a range of grades.

Next Steps

To discuss your requirements in more detail or
place an order for services please contact us at
ccs@fnc.co.uk