

decision analysis  
services

A decorative graphic consisting of a triangular area filled with a grid of small dots, located in the upper left corner of the page.

# Futures Framework Prospectus

June 2023

For further information, please contact Decision Analysis Services Ltd ( [futures@das-ltd.co.uk](mailto:futures@das-ltd.co.uk) )



Analytics +  
Foresight Hub

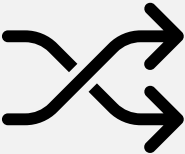
A decorative graphic consisting of a triangular area filled with a grid of small dots, located in the lower right corner of the page.

## Our Toolkit



**Tools for gathering intelligence about the future**

- 7 questions
- Horizon scanning
- Delphi
- Innovation foresight
- Trends analysis
- Issues paper development



**Tools for exploring the dynamics of change**

- Driver analysis
- Deductive scenarios
- Complexity – describing and explaining
- System mapping and conceptual modelling
- Uncertainty characterisation (e.g., axes of uncertainty)



**Tools for describing what the future might be**

- Trend forecasting
- SWOT analysis
- Quantitative scenarios
- Scenario development/ Scenario planning
- Visioning
- Disruptive Innovation



**Tools for developing and testing policy**

- Strategic Option Grid
- Strategy
- Policy and strategy stress-testing
- Roadmapping
- Systems modelling (numeric simulation)
- Timelining
- Backcasting
- Value Proposition Design



**Tools for communication and engagement**

- Data visualisation and dashboard development
- Interviewing
- Workshops
- Facilitation
- Group model building
- Expert Panel management



**Supporting skills**

- Change Management
- Project management
- Risk assessment and management
- Literature reviews
- Portfolio analysis
- Competence mapping
- Prototyping
- Benchmarking
- Gamification
- Customer journeys
- Consumer analytics
- Business Model design
- Market modelling
- Customised data acquisition systems

***Futures Thinking is a collection of systematic approaches to thinking about the future and exploring factors that could give rise to possible and probable future characteristic, events and behaviours.***

## **Decision Analysis Services Ltd (DAS)**

Decision Analysis Services Ltd (DAS) is an independent management consultancy, established in 2007, with in-depth specialism in Futures and applying qualitative and quantitative tools and techniques to support policy, strategy development and decision making with clients across Government, Local Authorities, Health, Defence, and Police. We have experience of working in the UK, North America, Europe, Japan and Australasia.

### **Portfolio of Skills Overview**

DAS is a leading supplier of **Futures, Data Analytics, Systems Thinking** and **System Modelling** consultancy to public, private and third sector organisations around the world. We support our think strategically about their individual long-term opportunities, challenges and actions enabling them to develop and test policies and strategies that are evidenced, robust and resilient.

We have extensive experience and a great track record working in partnership with our clients to provide futures and data analytics approaches to improve insight, future foresight and make informed strategic and policy decisions through:

1. Developing Insight – Turning data into intelligence.
2. Turning insight into foresight – Building evidence to inform decisions that more resilient to the future.
3. Options evaluation and data-enabled decision support – Assessing and evaluating the future trends of different operational and strategic options.

## Developing insight - *Turning data into intelligence*

We use **systems thinking** and **system modelling** approaches to develop shared insight. We use **stakeholder engagement** and techniques such as **research**, **horizon scanning**, **scenario generation** (through **facilitated workshops**), **system mapping**, **scenario quantification**, **Delphi**, **Trend analysis** and **data visualisation** to describe and explain the 'as-is' information, data, processes, trends and decision/policy drivers. We provide specialist capability in:

- **Service User and Community Insight** – applying a range of techniques, including **market modelling** and **consumer analytics**, to understand and better understand, predict and make strategic choices based on the needs of communities and different user groups.
- **Understanding the current state** – we apply **advanced statistical analysis** to better understand historic trends and the drivers of change to explore where we are and how we got there.
- **Data acquisition and visualisation** – we analyse, link, translate and present data and information in formats that provide enhanced understanding, are easy to interpret and support rapid and effective decision making.

## Turning insight into foresight – *Building evidence to inform decisions that more resilient to the future*

We use highly innovative approaches to describe what the future might be like using a range of specialist forecasting, visioning and scenario generation methods through to complex modelling and simulation techniques. Our futures modelling supports our clients to **forecast trends** and the impact of policy and strategy on demand and related issues such as workforce and capability planning. We apply a range of **visioning** and **scenario generation** methods through to **complex modelling** and **simulation techniques** that allow our clients to consider and evaluate the impact and demands of future scenarios and explore policy options. We support our clients to:

- **Simulation and modelling** – we develop dynamic and rigorously validated and quantified system models and process simulations which model service pathways, service demand and supply. This includes machine learning and AI techniques to develop rigorous predictive models.
- **Predict potential future trends and scenarios** – we support our clients with clear future foresight through forecasting trends, developing scenarios and their implications for service demand, workforce and resource requirements. We apply **Predictive analytics** – using a range of machine learning, artificial intelligence and system modelling techniques to understand how the organisation and the environment it operates in will evolve.
- **Turn insight into foresight** – Combining the insights generated from historic analysis of data with predictive modelling to provide bespoke tools to predict the future and allow the impact of policy and organisational decisions to be quantified and explored.

## **Options evaluation and data-enabled decision support – Assessing and evaluating the future trends of alternative operational and strategic options**

DAS are experienced in enabling clients to make informed and robust decisions on policy options, strategies and business improvement propositions. Our approach supports informed and robust decision making through rigorous and structured options evaluation approaches and techniques. DAS has facilitated numerous multi-agency workshops, using techniques such as **systems modelling, driver analysis** and **axes of uncertainty**. Consensus building has been undertaken using **Delphi** elicitation processes and used **online voting tools** to stimulate debate. We do this through:

- **Stakeholder engagement and facilitation** – we design and facilitate workshops and focus groups bringing together stakeholders and experts from related areas and similar contexts. We have expertise in designing and **facilitating** numerous **workshop**-based approaches using techniques such as **system mapping, deductive scenario generation, driver analysis, Delphi** and **visioning**.
- **Structured options evaluation** – we apply a range of evaluation tools and techniques to create challenge and support robust decisions including: **stress-testing, Delphi, and axes of uncertainty**.
- **Data visualisation – describing and explaining complex analysis** and insights aligned to the audience knowledge and expectations through presentation and **visualisations**. We use **data visualisation** tools, such as R, Python, Tableau and Power BI to allow narrative led exploration of data insights in results **workshops**. We also produce **infographics** to **summarise complex messages and processes**.

## Case Studies

Futures is central to DAS' consultancy approach and we have applied Futures techniques on projects across public, private and charity sectors, for example:

	<p>Development of a <b>Horizon Scanning</b> framework to assess the potential long-term impact of external forces to enable a non-ministerial government department to understand the risks to their long-term <b>strategy</b>.</p>
	<p>Using <b>causal loop diagrams</b> to understand the drivers of workforce supply across the health and social care system and the underlying dynamic feedback processes and development of <b>System Dynamics</b> based workforce supply models to support <b>policy analysis</b>.</p>
	<p>Identifying the services available to victims and perpetrators of domestic violence to develop a <b>system map</b> of service provision and enable informed service commissioning.</p>
	<p>Identifying drivers for investment in very high capacity networks using <b>research, interviews</b> and <b>workshops</b> to develop <b>qualitative system maps</b> that help EU telecoms regulators understand the characteristics of their current infrastructure and the options with the highest impact for encouraging investment.</p>
	<p>An innovative approach to research management leveraging automation and principles of information management enabling automated human-friendly reporting, quantitative analysis of research outputs, interactive monitoring of research progress and accessibility of research outcomes to future research teams.</p>
	<p>Innovative approaches to <b>risk assessment and risk management</b> such as the development of approaches to <b>visualise</b> project risks (for example using Power BI, R-Shiny and Python-DASH) and analyse using <b>AI based techniques</b> such as <b>Natural Language Processing</b>.</p>
	<p>Development of an Adults Social Care Demand model to project future costs and demand for a variety of social care activities over a ten-year time horizon to support <b>decision making</b>.</p>
	<p>Detailed analysis of customer journeys, economic, demographic, social and behavioural change through <b>multivariate statistical analysis, interviews</b> and a novel use of <b>MCDAs</b> to inform marketing strategy of a large consumer goods company.</p>
	<p>Development of a <b>systems-based model</b> via <b>facilitated workshops</b> to evaluate value for money of <b>alternative quantitative scenarios</b> to support a multi-million pound business case.</p>

## About DAS

Decision Analysis Services Ltd (DAS) is an independent management consultancy, established in 2007, with in-depth specialism in Futures and applying qualitative and quantitative tools and techniques to support policy, strategy development and decision making with clients across Government, Local Authorities, Health, Defence, and Police. We have experience of working in the UK, North America, Europe, Japan and Australasia.

## Contact Information

Please contact Decision Analysis Services at: [futures@das-ltd.co.uk](mailto:futures@das-ltd.co.uk) or telephone: 01256 338608

decision analysis  
services

