

Better Decisions in a Complex World

In challenging economic conditions it is vital to ensure that decisions are soundly based

In the current climate, it is particularly difficult for organisations to make the right decisions, select the best options or gain a competitive advantage. Our team of Business Analytics professionals are dedicated to helping clients make better informed decisions by applying modelling, quantitative analysis, objectivity and rigour to minimise risk and uncertainty.

Analytical solutions will help you deliver value if your company is undergoing change, needs to justify a strategic decision or is seeking to improve its current operations.

Our Team

In the UK our Business Analytics team has 35 experts highly experienced in a wide range of analytical and modelling skills. The Business Analytics team has a database of over 400 client credentials and models which demonstrate our successes across all industry sectors.



Our Services

Our main services are focused around the business related issues that our clients are facing:

Business Analytics	
Analytics and Modelling	Value Management
Workforce Analytics <ul style="list-style-type: none"> Using analytical based modelling to inform and optimise: workload planning and allocation, resource scheduling, pay and reward strategy, staff retention, workforce evolution and succession planning Evaluating the operational impact of changes to processes or operating model design on employee workload and performance 	Business Case <ul style="list-style-type: none"> Private Sector case for change Public Sector "5-case" model Business Case appraisal
Customer Analytics <ul style="list-style-type: none"> Intelligent analysis of operational data to understand and monitor customer behaviour Segmentation of the customer base to identify valuable customers, customers likely to churn, poor credit risks and fraud Using insight gained from analytics to develop customer retention/acquisition strategy, pricing strategy and improve debt management 	Benefits Realisation <ul style="list-style-type: none"> Using our SAFER methodology for benefits structuring & analysis; benefits logic and benefits tracking Development of economic models to support value-based pricing
Risk Analytics <ul style="list-style-type: none"> Understanding the relationship between level of risk exposure and the impact on profitability, service to customers, staff and infrastructure Developing models to evaluate and inform mitigation strategies for operational, asset and investment risk 	Value Based Decision Making <ul style="list-style-type: none"> Commercial modelling and scenario analysis to support options appraisal New business venture analysis and modelling
Business Performance Analytics <ul style="list-style-type: none"> Using data visualisation tools to analyse the drivers of cost and value providing a better understanding of where inefficiencies lie Using intelligent benchmarking to make realistic performance comparisons Evaluating impact of business strategy /service delivery options on future business performance to provide confidence the change is robust 	Portfolio Management <ul style="list-style-type: none"> Strategy and definition Investment appraisal Prioritisation of projects Assurance, monitoring and reporting
Supply Chain Analytics <ul style="list-style-type: none"> Analysing the drivers and underlying trends in demand for products and services Building Predictive models that enable organisation to effectively manage their supply chain, workforce and finances Using analytics to optimise supply chain strategy - warehouse design, logistics, merchandising replenishment, demand planning 	
Digital Analytics <ul style="list-style-type: none"> Advising on how new sources of data and insight can be used to drive improved performance Using "war game simulations" to inform and train organisations of the impact of the digital revolution 	

Our Track Record

Each of our services has a wide range of examples where the Business Analytics team has delivered value to its clients.

Analytics and Modelling

- We developed a visual dynamic model to help optimise **Business Performance** for the Department of Work and Pensions. The model simulates the flow of contacts through a new benefits process, allowing 'what-if?' testing of scenarios to ensure that the implementation of this major change took place smoothly and efficiently.
- We carried out a **Risk** analysis and mitigation study for a major UK water company as part of their five-yearly regulatory submission.

As part of this, we developed and carried out a detailed programme of sensitivity analysis on the asset performance models which were used to determine the optimum investment plan. This identified the level of certainty associated with each area of investment and gave significant additional confidence in the £2.5bn Capital Investment plan.

Value Management

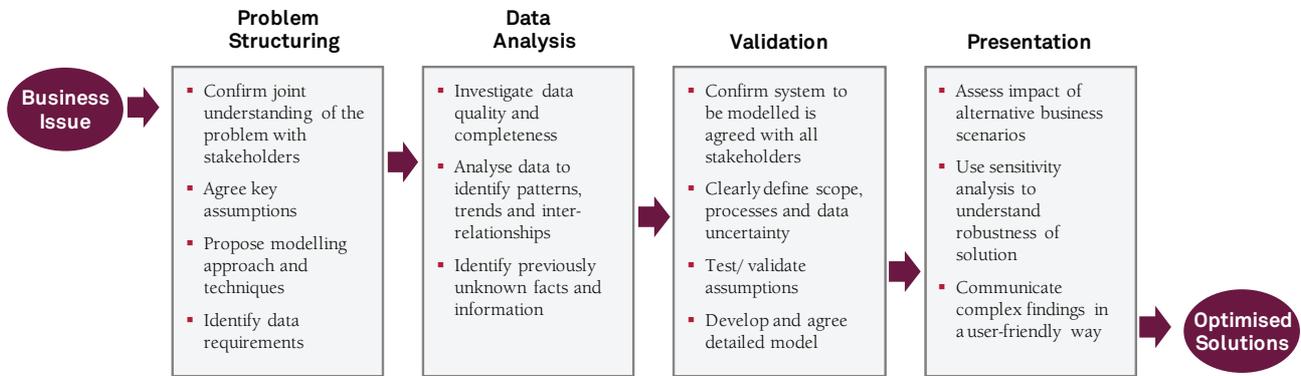
- We used a **Value Based Decision Making** approach to advise a central government ministry financially and commercially throughout the procurement process for contracts worth over £3 billion. We supported the design of the contractual payment mechanism, design of standard

pre-defined financial models, the financial evaluation methodology, and delivered the final financial evaluation and due diligence. Our analysis identified savings of £500m over the life of the contracts.

- We supported the Office for Criminal Justice Reform in the area of **Business Case and Benefits Realisation** by developing a detailed and consistent system of portfolio management to monitor the progress of projects, benefits realisation and capacity for change. This ensured that the large number of cross-organisation initiatives delivered maximum benefits to the many partners involved.

Our Approach

Our typical four-stage approach to resolving business issues:

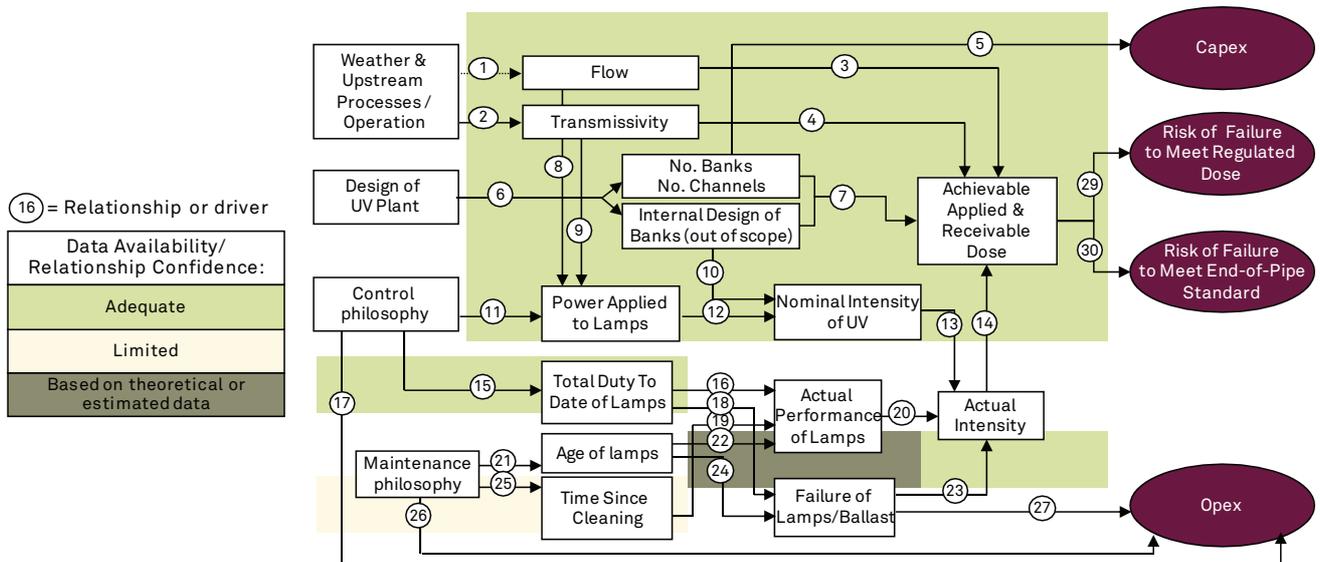


The core of our approach is the ability to abstract a model of the real-life problem that is intuitive to use, yet sufficiently realistic to support robust decision making. These models are used to provide insight, and to quantify the risks and benefits associated with solutions to complex business problems. When developing models to resolve business issues we typically use a systematic four-stage approach, as shown in the diagram above. Capgemini's collaborative approach to problem solving is designed to

communicate complex issues in a simple and straightforward manner. By using visual interactive models, stakeholders are able to experience the impact of their assumptions and buy into an agreed solution. A key part of our collaborative approach to problem solving is the use of conceptual models. These are living diagrams that encapsulate what is being modelled and the inter-relationships between the different components. The conceptual models have many uses throughout an assignment:

- Explain the scope of the model and the nature of the relationships to be examined
- Confirm understanding of the system to be modelled with all stakeholders
- Highlight varying levels of confidence in the data available (or other variables) by colour coding
- Are used throughout project lifecycle from problem definition to model building through to analysis.

Example Conceptual Model



Our Capabilities

On engagements we draw upon the experience of our consultants in using their specialist capability expertise to provide insight and deliver sound advice to clients, using techniques such as:

Visual Process Simulation

The use of animated software to depict business activities in a visual model, allowing alternative scenarios and configurations to be tested and compared.

System Dynamics

A business modelling approach which adopts a systemic approach to problem solving. Rather than focusing on linear interactions, it deals effectively with environments and issues which evolve and interlink in highly complex ways over time.

Monte Carlo Simulation

Using models based on repeated random sampling to generate sets of alternative scenarios, providing insight into the range and likelihood of different outcomes.

Optimisation and Scheduling

Optimisation uses mathematical techniques to determine the best solution to a problem for a given set of constraints. It is often linked with Scheduling – the optimised allocation of resources (people, equipment) to meet an objective. Data Mining & Segmentation
The use of analytical tools to carry out predictive modelling and segmentation/ clustering, uncovering facts and information which would otherwise remain hidden.

Forecasting

The estimation of the most likely future values of a variable using available data, such as historical data or expert opinion.

Statistical Analysis

Using techniques such as fitting of distributions to uncover relationships, quantify probabilities and quantify risk as part of sensitivity analysis.



About Capgemini

With 112,000 people in 40 countries, Capgemini is one of the world's foremost providers of consulting, technology and outsourcing services. The Group reported 2010 global revenues of EUR 8.7 billion. Together with its clients, Capgemini creates and delivers business and technology solutions that fit their needs and drive the results they want. A deeply multicultural organisation, Capgemini has developed its own way of working, the Collaborative Business Experience™, and draws on Rightshore®, its worldwide delivery model.

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Capgemini Consulting is the Global Strategy and Transformation Consulting brand of the Capgemini Group, specialising in advising and supporting organisations in transforming their business, from the development of innovative strategy through to execution, with a consistent focus on sustainable results. Capgemini Consulting proposes to leading companies and governments a fresh approach which uses innovative methods, technology and the talents of over 3,600 consultants worldwide.

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