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catalyze 

catalyze 

Creating impact through insight

Our Mission

Catalyze is a consultancy partner, enabling organisations to make effective decisions and supporting the implementation of those decisions. Proudly and passionately independent in thought, yet collaborative by nature, we help you enact change that ensures long-term results for your business.



About Catalyze

Our foundations

Founded in 2001 in association with the London School of Economics.

To develop and apply MCDA tools, training and techniques to inform complex decisions.

Contributing to good practice, such as the UK Treasury Green Book.

Client impact

Today working with clients across a range of industries, with a healthy focus on Defence

We have supported 1000s of decisions

Helping our clients prioritise, and make and implement effective decisions

G-Cloud offer

We have a track record in exploiting, designing, implementing, and deploying cloud solutions for both Public and Private Sector clients.

Our experienced team of consultants, analysts, designers, and developers are committed to the development and application of practical solutions to complicated, complex or chaotic situations, identifying and exploiting cloud opportunities.

Our approach

We are proudly and passionately independent in thought, yet collaborative by nature. We help enact change that ensures long-term results.

Catalyze became an Employee Ownership Trust in 2021, allowing us to better meet personal and collective aspirations and share the rewards of our success

Why work with us

We support our clients through

Trust

We trust in each other, and our clients trust us to deliver. We never over-promise, our word is our bond, and we will work with you to see your project through.

Honesty

With a true focus on value, underpinned by integrity, honesty and willingness to challenge, we will help you achieve your ambitions and change for the better.

Capability

Our team's unique mix of knowledge and experience combines insight, intuition and integrity to identify and enact changes that deliver results and ensure future prosperity.

Our people are

Empowered

We take genuine pride in delivering outstanding services and solutions. We are entrusted with autonomy and are focused, ambitious and bold in helping others achieve.

Supported

We enjoy our work, celebrate our team's collective success, and benefit from embracing diversity, inclusivity, and shared responsibility.

United

Working together, individuality is encouraged and supported by the unique capabilities of the entire team. Together we learn, improve and inspire each other to new heights.

From supporting our clients through a combination of trust, honesty and capability, to empowering, supporting and uniting our team, our values distil the essence of what it's like to work with Catalyze as a client, and as an employee.

Employee Ownership Trust



Dr Grace O'Connor
Senior Consultant

Catalyze became an Employee Ownership Trust in 2021, allowing us better meet personal and collective aspirations and share the rewards of our success.

We are continually developing our offer to meet the needs of our employees. We recently introduced private healthcare for employees and their families. Research has shown employee-owned businesses perform better, are more resilient and have higher levels of employee engagement and satisfaction. All factors we strive to achieve as part of our culture at Catalyze.

Social Value

As well as creating a positive impact for our customers, we aim to make a positive social impact as a business. From employee volunteer days, to good cause donations, and supporting local businesses, every year we allocate time and funds for good causes nominated by our team, customers and partners.

We consider our environmental impact and have recently introduced an electric car leasing scheme. We positively address workforce inequalities through part-time/flexible work patterns and locations and our Armed Forces Covenant pledges.



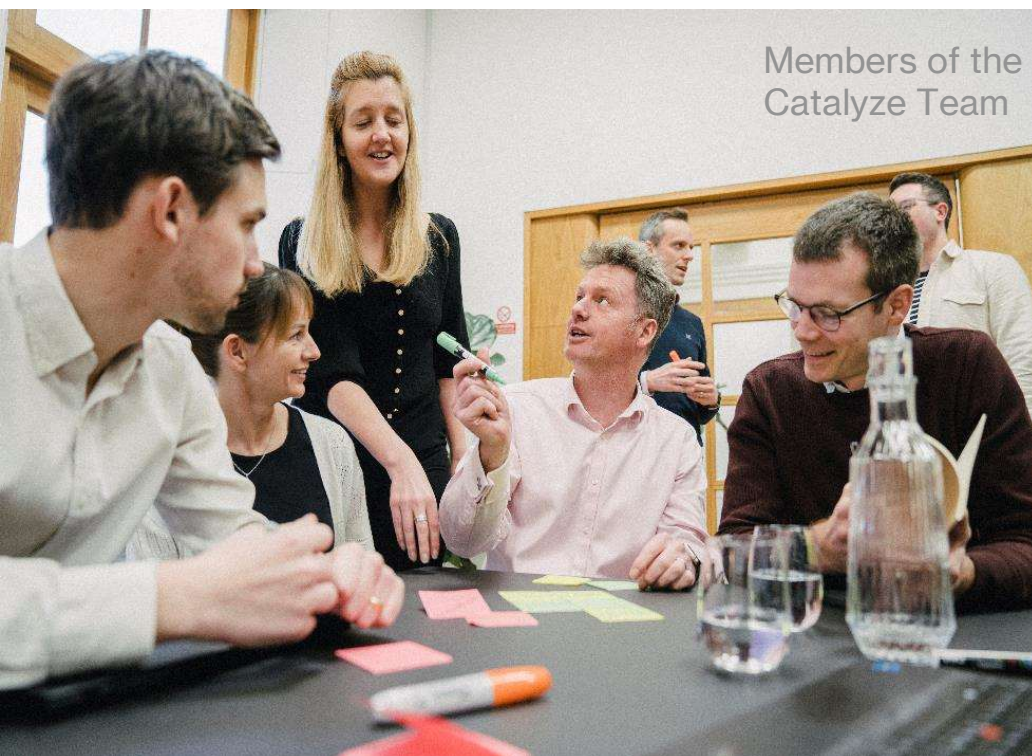
EMPLOYER
RECOGNITION
SCHEME

GOLD AWARD

A portrait of Michele Crossman, a woman with brown hair and glasses, wearing a red knitted sweater, smiling. The background is a soft, out-of-focus light blue and white.

Michele Crossman
Principal Consultant

Capability



Our highly capable team encompasses consultants, analysts and domain experts, who enjoy their work and take pride in delivering outstanding services and solutions for our clients.

We follow an ISO accredited Quality Management System for delivery of our projects, ensuring consistent delivery of high-quality products and services for our clients.

All company staff hold Security Clearance and are experienced in delivering work at Above Official for Defence and Security clients.

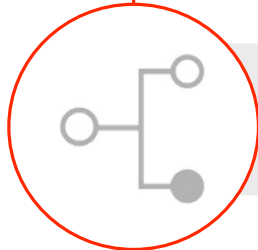
Services

Through a mix of processes, tools and analysis, we improve organisational performance by enabling better decisions.

We have a track record of delivering our three G-Cloud service offerings across both public and private sector clients.



Cloud-hosted simulation & scenario analysis for decision support



Enterprise decision support and strategic planning solutions



Digitisation of Business Operations

Cloud-hosted simulation and scenario analysis for decision support

Service overview

Cloud-hosted operational analysis and simulation models to understand, explore and test policy, strategy, capability and procurement choices.

Used to support investment appraisals, business cases, capability investigations, and policy and strategy formation.

Bespoke development utilising stochastic, iterative and intelligent agent-based approaches.

Deployment to Above Official environments available.

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Claire Spencer
Managing Consultant



Features

- Cloud-based solution for various operational analysis and simulation problems
- Supporting procurement and capability option assessment and policy/strategy formulation
- More scalable, manageable and accessible than traditional Excel solutions
- Simulation models to understand and test complex system interactions.
- Scenario modelling and testing
- Deployment platforms including Defence Data Analytics Platform and Palantir Foundry
- Compliant with relevant analysis and software standards
- Procurement and capability option assessments
- Experience of deployment to MOD Above Official environments
- Using high-code languages such as Python, JavaScript, TypeScript and/or React

Benefits

- Provide auditable analysis compliant with Treasury Aqua Book standards
- Test and explore options against different scenarios at pace/scale
- Rapid and Agile model development
- Solutions deployed within Defence secure infrastructure

Case Study - STORM

UK and NL are both looking at procuring the next generation of amphibious shipping to support Littoral Strike and as such are looking to collaborate on the supporting Operational Analysis. UK MOD has access to a number of simulations and tabletop wargames for Naval manoeuvres and for ground operations post littoral insertion, but there is a gap in analysing surface manoeuvre. Naval manoeuvre simulations are too coarse in spatial resolution to simulate landing craft and land simulations start with an assumption that penetration of Red defences was successful.

Solution

STORM was developed in collaboration with DE&S, NL MOD and Dstl to bridge the identified analysis gap.

Using a cloud hosted web-browser interface and Excel data input, STORM allows rapid simulation of landing craft vs Red defensive laydown using real maps to simulate anywhere on earth.

Single simulations take seconds and multiple simulations can be batch run to get Monte Carlo statistics.

Runs are repeatable allowing the user to investigate specific cases.

Approach

STORM is a fixed timestep discrete event simulation built in Python.

Each entity can have sensors and effectors attached and will act according to pre-programmed behaviours.

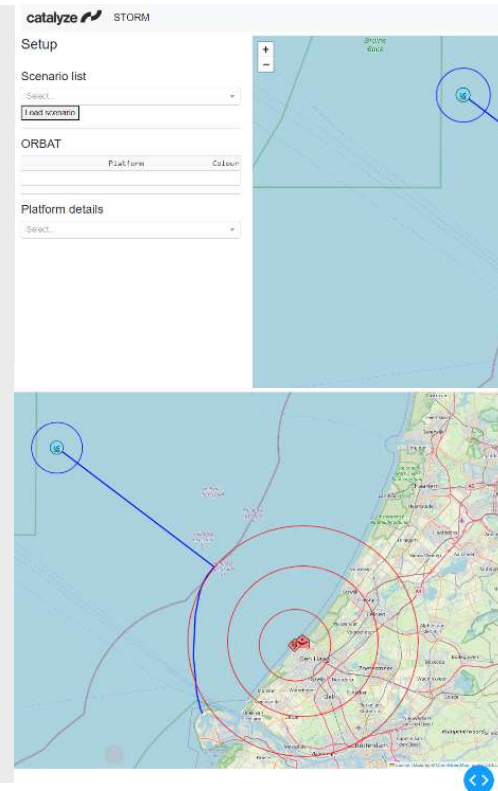
Entities can switch between behaviour profiles (known as Stances) dynamically, allowing them to react to changes mid-simulation.

For example, a Red patrol craft will follow a pre-determined path until it detects a Blue landing craft and then will move to intercept.

Benefits

STORM gives the ability to rapidly analyse the effectiveness of different Blue and Red capabilities and TTPs and their interactions.

By having precise location information in the simulation, it allows the user to use STORM as a planning tool, using the rapid simulation capability to plan routes to maximise success vs a Red defensive laydown



Enterprise decision support and strategic planning solutions

Service overview

Catalyze helps organisations deliver by aligning people, processes and technology to balance short and long-term objectives, risks and costs.

We design, develop and implement enterprise-wide processes enabled through cloud-based systems to support organisation budgeting and planning.

Helping organisations plan and decide with confidence and evidence.

Ben White
Managing Partner

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Features

- Enterprise planning and budgeting cloud-hosted solutions
- Business process design, codification and implementation
- Aligning resources and activities to strategic objectives
- Strategic options development and prioritisation
- Options appraisal and balance of investment
- Multi-Criteria Decision Analysis (MCDA)
- Decision Conferencing
- Benefits analysis, demand analysis, activity analysis, financial modelling
- Integrate with existing data sources, systems and visualisation solutions
- Utilise existing enterprise software and licensing eg M365, PowerBI, PowerApps

Benefits

- Sustainable and cost-effective digital solutions built on accessible technology
- Creates better alignment between strategy and operations
- Automated and simplified routine business processes
- Identification and implementation of affordable plans that deliver maximum benefit
- Improved accountability and inclusiveness
- Delivers improved stakeholder buy-in
- Ensures that delivery is on track through performance frameworks
- Project delivery quality assurance to standard ISO9001:2015
- Generation of evidence base for decisions
- Decision making method compliant with Government Green Book standards

Case Study – Prioritisation and resource allocation solution

UKStratCom required a method, culture and discipline to balance resources across its complex and federated business to maximize delivery of the Command's strategic priorities and Defence Outputs. All in the context of escalating threats, limited resources and funds.

Solution

Catalyze has successfully developed and embedded robust and transparent prioritisation and resource allocation processes, ways of working and tools across the private and public sectors. Including across the Defence enterprise.

Following initial review of the Command's decision-making processes, technologies and ways of working, Catalyze worked with the portfolio office to adapt our standard approach, and design and implement a planning solution.

Approach

Streamlined business processes for strategy planning and resource allocation.

Multi-Criteria Decision Analysis (MCDA) prioritisation and balance of investment methodology and tools to build a robust evidence-base.

Through the alignment of the prioritisation framework to the command's strategic objectives.

Embed the process and ways-of-working in the organisation.

Tooling to manage the process, perform MCDA and support getting the best "bang for buck" from available resources.

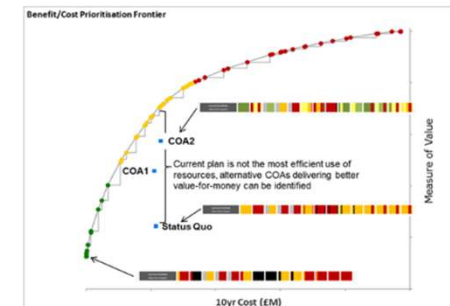
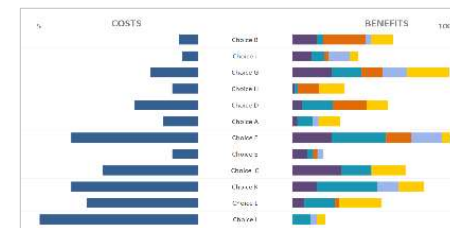
Benefits

Decisions on which projects / programmes should be accelerated, expanded, delayed, descoped or stopped to deliver the Commands objectives

Identification of the best balance of capabilities and activities to maximise benefits for limited resources and funds

Alignment of stakeholders with preconceived opposing perspectives, priorities and objectives

A robust, transparent and exploitable evidence base to support agile portfolio controls and management



Digitisation of Business Operations

Service overview

Helping organisations exploit data and digital cloud technologies, aligning operations to strategy and delivering efficient business operations.

Defining products and developing services shaped by business capabilities, processes, available technologies and transformation ambition.

Modernising operations and processes, delivering digitisation and automating best practice.

Engaging stakeholders to deliver credible cloud enabled change



Jonny Winterburn
Principal Consultant

Features

- Define, shape and implement realistic digital vision, strategy and plan
- Compliance with relevant software policies and standards
- Review, modernise and simplify business processes utilising no/low code platforms
- Requirements capture and options identification recognising current/projected digital competence
- Proven experience of the restrictions in government and Defence implementations
- More scalable, manageable and accessible than traditional Excel solutions
- Integrated with existing data sources, systems and visualisation solutions
- Build digital capabilities and skills with on-the-job coaching, comprehensive handover
- Utilise existing enterprise software and licensing eg M365, PowerBI, PowerApps
- Collaborative stakeholder engagement and management

Benefits

- Realistic, affordable digitisation plans and solutions maximising existing investments
- Sustainable and cost-effective digital solutions built on accessible technology
- Increased organisational efficiency and effectiveness
- Improved alignment of operations to digital strategy
- Digital solutions aligned to business needs that maximise existing capabilities
- Automated and simplified routine business processes
- Enhanced business decision-making through reliable up-to-date and relevant Management Information
- Effective change and transformation management
- Reduced data processing and increased opportunities for analysis
- Enhanced digital skills of users, Crown Servant developers and stakeholders

Case Study - DMIS

MOD's CSOC HQ staff monitor and manage a complex and diverse portfolio of projects and programmes. CSOC needed a system to understand and govern the portfolio, including finances, delivery performance, objectives, governance data and more. Much of this information existed but was not accessible, linked or exploitable.



Solution

An initial review of processes determined there were several opportunities for simplification, modernisation and automation. However, more fundamentally there was not a shared view of the contents of the portfolio or the widespread understanding to consider its performance cross-functionally.

Consequently, we established a Data Management Information Service (DMIS) utilising the M365 cloud suite of products to provide outputs to CSOC HQ staff.

Products include data capture, data management, data visualisation and data exploitation tools.

Approach

Streamlined business processes for efficiency and digital optimization.

Leveraged existing MOD tools and technology, to architect and develop a sustainable data integration and MI solution exploiting MS Power Platform available on MOD IT.

Integrated disparate MOD datasets to build a cross-functional curated dataset that is automatically created and always current and available

Created MI reports and applications in the DMIS environment to support staff and governance forum needs.

Improved the Command's digital culture and literacy, aligning with Defence's Digital and Data Strategy

Benefits

Staff efficiencies through the automatic creation of current, accurate and authoritative Management Information reports, and removal of redundant activities

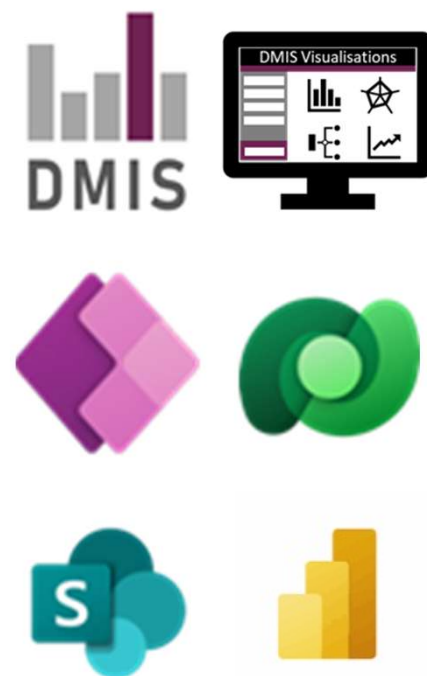
Enabling staff to focus on analysis not data processing, and senior meetings to focus on understanding and action, not simply "admiring the problem"

Enhanced digital and analysis skills

More sustainable processes and tools

Exploiting MOD's existing data, tooling and licensing

Creation of structured data sources that can be exploited across the Command, Defence and by other systems





We exist to help organisations enact change that ensures long term results. Our reputation is built on getting the job done and delivering quality outputs, focussing on value and underpinned by integrity, honesty and a willingness to challenge.

Our highly capable team encompasses consultants, analysts and domain experts, who enjoy their work and take pride in delivering outstanding services and solutions for our clients.