

G-Cloud 15

MLOps & GenOps

Service Definition

Datasparq MLOps & GenAI Ops Services

Datasparq's MLOps and GenOps Services help organisations reliably deploy, operate and scale machine learning and generative AI solutions in production environments. The service focuses on putting the processes, tooling and guardrails in place to ensure AI solutions remain performant, secure, explainable and cost effective over time.

Many organisations can develop AI models or proofs of concept but struggle to move them into production or sustain them once live. According to MIT, around 90% of AI solutions never reach production, and even fewer deliver sustained value once live. Common challenges include long deployment cycles, limited visibility of model performance, unmanaged data or model drift, high operational overhead, and a lack of confidence in AI outputs. These challenges are amplified for generative AI, where models interact directly with users and rely on rapidly changing data and prompts.

Datasparq addresses these challenges by designing and implementing robust MLOps and GenOps capabilities that support the full lifecycle of AI solutions, from experimentation through to live operation and continuous improvement. Our approach ensures AI solutions can be deployed safely, monitored effectively, and evolved without excessive manual effort. This is done while also enabling our clients to build long-term capabilities, by putting in place the right talent and operating model to sustain these ML and GenOps platforms.

The service is technology agnostic and can be delivered across Microsoft Azure, Google Cloud Platform, Databricks and Snowflake, integrating with existing data platforms and AI tooling.

What the service covers

Datasparq's MLOps and GenOps Services cover the operational foundations required to run AI solutions reliably at scale. Typical areas of coverage include:

- Assessment of current AI, machine learning or generative AI maturity and operating challenges
- Design of end-to-end ML and GenAI operational workflows, from development to live service
- Implementation of automated pipelines for model training, deployment, versioning, reusable components and templates to multiply developer/data scientist efficiency.
- Configuration of model serving approaches including batch, real time and API-based access
- Monitoring of model performance, data drift, concept drift and usage patterns
- Experiment management and support for controlled or automated re-deployment approaches such as champion challenger, shadow and A/B testing
- Operational controls for generative AI including prompt management, response evaluation and guardrails
- Logging, traceability and auditability of model inputs, outputs and decisions
- Alerting and notification for performance degradation or operational issues
- Integration with BI and reporting tools to surface operational and business metrics
- Security, access control and assurance aligned to organisational and government standards
- Documentation, handover and enablement of client teams
- Ongoing support, enhancement and operational monitoring where required

How Datasparq works

Datasparq takes a pragmatic, delivery focused approach to MLOps and GenOps . We start by understanding the AI use cases in scope, the value at stake and corresponding risks associated with these,

and the level of reliability and assurance required. This ensures that operational controls are proportionate and aligned to business and regulatory expectations.

We design MLOps and GenOps capabilities as reusable, modular components that integrate with existing platforms and ways of working. Automation is prioritised to reduce manual effort, improve consistency and shorten time to production.

For generative AI, we place particular emphasis on transparency, monitoring and governance. We help clients understand how models are being used, how outputs are generated, and where controls are required to manage risk, bias or misuse. Human-in-the-loop oversight is built into workflows where appropriate.

Delivery is iterative and aims to shorten the path to value, with early implementation of monitoring and controls as part of the development lifecycle. This allows issues to be identified and addressed quickly, rather than after problems have emerged in production.

This offering aims to enable clients by building long-term ML and GenAI Ops capabilities. This is done by establishing the right talent and operating model, either embedded within their own technical and business teams or delivered collaboratively by Datasparq as an integrated capability, augmenting the customer organisation.

Datasparq works closely with client data science, engineering and operational teams throughout delivery, supporting knowledge transfer and capability building to ensure solutions can be sustained over time.

Where required, Datasparq provides support using NSV SC-cleared personnel, enabling safe operation within sensitive or restricted public sector environments. Security, data protection and responsible use of AI are embedded into day-to-day service operation, aligned with ISO/IEC 27001 controls and government guidance.

Responsible and trustworthy AI

Responsible use of AI is a core part of Datasparq's values and ethos. We support public sector organisations to design AI strategies and solutions that are ethical, explainable and aligned to existing data protection, security and assurance frameworks. This includes consideration of:

- Data governance, quality and provenance
- Model transparency, accountability and monitoring
- Human oversight and decision support
- Organisational controls, assurance and risk management

Our work helps organisations move forward with confidence by ensuring that governance and responsibility are designed in from the outset, rather than treated as an afterthought.

Enabling adoption and long term value

Datasparq recognises that strategy and solutions alone do not deliver outcomes. Successful AI and data initiatives depend on adoption, skills and cultural change. As part of our engagements, we help organisations plan for:

- Target Operating Model (TOM)
- Workforce impact and skills development
- Change management and communications
- Measures and metrics to track value and benefits realisation

- Building sustainable in house capability rather than long term dependency

This ensures that AI and data investments translate into improved services, better decisions and lasting organisational capability.

Typical outcomes for buyers

Buyers using Datasparq's MLOps and GenOps Services typically achieve:

- Faster and more reliable deployment of AI and GenAI solutions into production
- Improved visibility of model performance, usage and operational health
- Reduced risk from unmanaged data drift, model degradation or silent failure
- Greater confidence in AI outputs through monitoring, traceability and controls
- Lower operational overhead through automation and standardised processes, by increasing data scientist / development team efficiency in developing new & more successful solutions
- Improved ability to scale AI across multiple use cases and teams
- Stronger governance and assurance aligned to public sector requirements
- Better return on investment from AI initiatives beyond proofs of concept

Datasparq's MLOps and GenOps Services enable organisations to move from experimental AI to dependable, production-ready capability that can be trusted and scaled across the organisation.

Further Service Details

Pricing

This service will be based on the standard Datasparq rate card for consulting services.

Standards and assurance

Datasparq delivers its services in line with recognised UK Government standards and good practice for security, data and digital delivery. We are ISO/IEC 27001 and Cyber Essentials certified and operate in accordance with UK GDPR and the Data Protection Act 2018.

Our services align with relevant government guidance including the NCSC Cloud Security Principles, the Technology Code of Practice, and established approaches to data governance, ethics and responsible use of AI. We apply proportionate security, assurance and risk management controls based on the nature of the service and the data involved.

Datasparq applies a responsible and ethical approach to the use of AI. We work with clients to ensure that algorithms and data driven tools are used fairly, transparently and without bias or prejudice. Where potential ethical risks are identified, we will raise these with the client and support appropriate mitigations to ensure fair treatment of individuals and compliance with relevant standards and guidance.

Service Constraints

Specific service constraints will be agreed at initial engagement, however typically no maintenance or modification to developed solutions shall be undertaken without direct approval from the customer.

If operationally necessary, any scheduled modifications and enhancements to developed solutions will be undertaken outside of typically working hours or in scheduled system downtime.

Service Levels

Specific levels of service and expected performance criteria will form part of the engagement scoping and contractual agreement.

Backup/Restore and Disaster Recovery (DR)

Documents and solutions will be regularly backed up as part of our ISO27001 assured backup and business continuity processes agreed. Disaster recovery options will be considered on a case-by-case basis from the needs of the customer.

Factors to consider include:

- Mission critical severity of the solution
- Previously agreed uptime targets
- Size and geographical location of the user base

Solutions range from automated failover capabilities with redundant systems to take load capacity in the event of total failure, to secure off site data storage that can be utilised to recover manually.

Training

Following initial engagement, training documentation will be provided as per the contract specification. If additional training is identified for system end users this can be delivered through service support delivery offering.

Typical training approaches range from workshops and mentoring at service go-live to longer-term solutions such as an extended on-site presence and support. Training will be developed in conjunction with the customer to achieve a best fit for the required skill levels and audience.

Ordering and invoicing process

Initial ordering of services will be confirmed by contract signature and receipt of confirmed purchase order to Datasparq Limited.

Consumer responsibilities

No specific consumer responsibilities have been identified for this specialised service offering. Customer dependencies and requirements will be discussed on an individual engagement basis and be reflected in contractual agreements.