

SAS® Analytics Support Services on G-Cloud

Service Definition



Your business goals matter to you, helping you reach them matters to us.

SAS® Analytics Support Services on G-Cloud

We maximise your SAS investment with a unified, end-to-end approach. Our consulting services deliver expert guidance for implementing and optimising SAS data and AI solutions, covering strategy, integration, data management, analytics, and training to ensure you get the most value.

We have the expert people, the rich industry insights and the SAS proficiency that can ignite imaginations, optimise your analytics investments, and put SAS to work to deliver value and game-changing competitive advantage. At the heart of SAS on G Cloud is the Analytics Lifecycle. By recognising and fully supporting the phases around DATA, DISCOVERY and DEPLOYMENT, you will get a complete process to generate impactful insights.

Everything we do is built around getting from data to value, with the Analytics Lifecycle as underlying principle. We have it down to a science. Whether you are exploring ideas in the Discovery phase or putting analytics into action in the Deployment phase, we can help you ask the right questions, find the right answers, and take the next step toward the most value.

Contents

SAS Analytics Support Services Overview	2
SAS Application Management	3
SAS Architecture Review	3
SAS GDPR Healthcheck	3
SAS Innovation Lab & Use Case Factory	4
SAS Analytical Model Development Service	4
SAS Model Ops Health Check Assessment	5
SAS Cloud Modernisation Assessment	6
SAS Reporting & Visualisation Service	6
SAS Data Quality Service	6
SAS Viya Quick Start	7
SAS Enhanced Support Services	7
SAS Digital Insights	8
SAS Staff Augmentation Service	9
SAS Attribution Service	9
Post Go-Live Kubernetes Enablement Services	11
Data Governance Service	12
SAS Viya Code Optimisation	12
Cloud Database Optimisation	13
Data Migration Service: Profiling	14
Ethics Guard AI Review	14
Rapid ModelOps Deployment	15
Elevate the Analyst Blueprint	15



SAS Analytics Support Services Overview

The goal of our Cloud Analytics Support Service is to get you to experience the power of SAS as rapidly and smoothly as possible. No matter what your business goals or what level of support within the Analytical Lifecycle is required, SAS can help you achieve – or exceed – your goals faster.

Our four decades of experience in analytics serves as the foundation of SAS Analytics Support Services on G Cloud. Highly skilled, certified consultants supported by a vast knowledge base and a global network of software developers, professional services consultants, dedicated education practitioners and technical support consultants work alongside you to help you gain both immediate and long-term value from your SAS investment. We partner with you to understand your needs and goals, and to help you chart an optimal path to success.

Our expertise ensures that every engagement follows SAS-defined methodologies and best practices to deliver tangible results. Our services division can deliver or support any and every step of your SAS journey - from the design and set up of your infrastructure, the management and governance of data, through to the delivery of analytical output, and everything in between, including:

- Architecture and environment design
- Installation/migration activity
- Administration of the software/environment
- Testing of the environment
- Data management and governance
- Business intelligence and visualisation
- Predictive analytics, advanced analytics and data science
- Model creation, model automation, model deployment, model operationalisation
- Customisable support levels, or a fully managed service.
- Program/Project Management

We work with you, your people, your technology, and your data. We run discovery and definition sessions to understand your needs. And depending on those needs we are highly successful at generating analytic-driven value quickly because we use a case-by-use case approach, delivered through our quick start, templated or tailored service models. Once your SAS environment is deployed, we will keep in touch and offer additional guidance and coaching as required, ensuring that you get the most from your SAS investment – on hand to provide advisory consulting to ensure everything is achieved seamlessly.

Whether you require our Cloud Analytics Support Services to meet a generic requirement or have specific requirements to support you on your Cloud journey, we have a series of defined services and quick starts that will allow you to obtain help against a specific objective – the following are a series of continuously developed service offerings that serve as short, quick start engagements and supplementary support services that can be delivered alongside your SAS on G-Cloud Managed Cloud Software capabilities.

In addition to our standard support and services engagements, we have developed several services that have been designed specifically to:

- Ensure you successfully prepare for your journey to SAS on Cloud
- Have the right level of support, depending on the skills inside your organisation or business requirement
- Augment your existing teams to ensure you get value and return from your SAS software investment
- Aid the development of new analytical capabilities within your SAS deployment
- Ensure your data is of the right quality and fit for purpose in delivering your analytical insights
- Introduce new approaches and techniques to complement your existing analytical development process and capabilities
- Prepare the necessary groundwork to begin your Digital and Analytics journey

SAS Application Management

What is it?	The SAS Application Managed Service is a subscription based remote service that provides ongoing day-to-day support for your SAS applications.
Why do it?	Following the closure of any project, the ownership of the risks and costs of the project deliverables' day-to-day operations need to be handed off to: • SAS Platform Admin team, responsible for: – SAS Platform availability – User management – Monitoring of daily batch processes and Level 1 incident management • BI or Analytics CoE (Centre of Excellence) – the custodians of how the application works. This team/function is responsible for: – Future minor enhancements – Level 2/3 Incident Management – Proactive Problem Management – Responding to business users' requests for information (RFIs) At SAS we have identified that many managed service providers only allow you to outsource the SAS Platform Admin responsibilities, not the application management. The SAS Application Managed Service addresses this gap, allowing you to delegate all day-to-day operations.
How to do it?	SAS will work with you to define an operating model that is tailored to the specific needs of your organisation.
Value	Allowing SAS to shoulder the responsibilities of your SAS application's day-to-day operations provides the following benefits: • Reduced and controlled costs • Free-up staff to focus on your core business • Remove single points of failure e.g., dependency on specific staff • Assurance that your application is being maintained by trained, experienced and qualified staff

SAS Architecture Review

What is it?	Expert advice to help optimise your use of SAS software by improving the effectiveness of your enterprise architecture.
Why do it?	Improve the efficiency of your IT processes; manage IT costs and provide mission-critical analytical services.
How to do it?	SAS will undertake a top-level analysis of your existing SAS landscape to provide recommendations in areas such as: • Performance / capacity / scalability • New use cases not yet envisaged • Integration with wider technology landscape
Value	The SAS Architecture Review Service will provide you with an immediate action plan to: • Optimise existing investment • Ensure compatibility and integration • Reduce risk and control costs

SAS GDPR Healthcheck

What is it?	Assessment of data management and analytics systems and processes - designed to quantify potential exposure to GDPR compliance risk.
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Why do it?	If you process the personal data of individuals located within the EU, you must be compliant with the GDPR regulations. To meet compliance requirements, you must show how you comply with the principles.
How to do it?	During a 5–15-day engagement, SAS will carry out: • A full inventory of all SAS systems deployed • A SAS systems security review • A full data and processing inventory The assessment process will help determine: • What personal data is being processed and whether it is GDPR compliant • Who has access to personal data and how the data is protected • How prepared you are for meeting the new rights and principles under the GDPR
Value	The SAS GDPR Readiness Assessment Service will deliver a recommendations report describing actions to be taken to ensure GDPR compliance. This will include: • Risk assessment • Mitigation advice • SAS roadmap and recommendation

SAS Innovation Lab & Use Case Factory

What is it?	Curious to identify the potential business value in your own data? Working together with a team of experienced data scientists from SAS, we will test use cases on your data to discover how your organisation can benefit from analytics.
Why do it?	Within a short timeframe and with a limited investment, this service allows you to test and document the business value in your data.
How to do it?	Our experienced data scientists will guide you through the process of defining use cases relevant to your business, process data and test hypotheses. Our consultants will communicate the results, so you can make an informed decision on which solution to pursue.
Value	Define and test-use cases together with a team of consultants • Get immediate value of your data • No need to train your own team • Outcome is tested and documented with limited investment

SAS Analytical Model Development Service

What is it?	Are you looking to adopt advanced analytics, artificial intelligence (AI) or machine learning (ML), but not sure how to justify the investment? We will help you structure data, develop and interpret models, and communicate their business value to key stakeholders and develop a statistical model that will generate rapid returns from your data.
Why do it?	A service to help you develop statistical models documenting how your organisation can benefit from advanced analytics, AI, and ML. The service includes theoretical training and consulting on methods, approach, and use of model results. Whether the model involves profiling and segmentation, retention, response modelling, profitability, basket analysis, or next logical product, our analytical consultants will develop a model that will quickly add value to your organisation. The documentation and model produced will equip you with a structured approach and process design for future model development.

How to do it? SAS will undertake a series of workshops to understand and define a business problem or opportunity, gather the data required and create the analytical base table for exploring / visualising / hypothesis testing / modelling and defining model performance acceptance criteria.

SAS will build the model and present the outcomes.

Value The SAS Analytical Model Development Service will deliver:

- Full documentation of the end-to-end model build process
- Details of assumptions and techniques used

The process will enable you to reduce the amount of time required to implement additional analytical solutions.

SAS Model Ops Health Check Assessment

What is it? As the use of analytical models grows, it's important to recognise the importance of implementing sound model management practices. Automated model execution and reliable model retraining helps always ensure the highest possible model performance.

The SAS ModelOps Health Check Assessment helps organisations implement a model governance framework and apply advanced analytics and machine learning in real-world settings. This framework is the foundation for establishing a unified workflow for monitoring models for signs of degradation and ensuring that models are updated and retrained when needed.

Why do it? You should consider this service if you want to:

- Deploy models quickly, consistently and at scale.
- Establish repeatable model operations processes and collaboration.
- Properly monitor model effectiveness.
- Increase productivity and decrease costs by eliminating manual efforts, rework, and errors.

How to do it? SAS analytics experts, together with your team, can uncover what it will take to successfully validate, deploy, monitor, retrain and govern models in your analytics environment.

SAS analytics experts will conduct a two-day workshop to learn about your models and environment, as well as fully understand any obstacles and challenges. The output of this workshop is a comprehensive strategy and road map that describes your readiness and maturity for operationalising analytics, as well as evidence for how well SAS Model Manager could support life cycle management and governance of your models.

Value Deployment of analytical models is the most valuable step in the analytics life cycle. It is where you realise ROI, and where you have opportunity to make an impact for your organisation. However, deployment can be the most challenging step to complete. This service helps you understand how to optimise your operationalisation efforts.

This service will help you gain insight into the people, technology and processes you need to:

- Monitor model performance and expected ROI.
- Systematically produce machine learning results on a consistent basis.
- Quickly move pilot projects into production.

This assessment provides recommendations for centralised governance and management of analytical assets. Our recommendations will focus on ensuring you get

consistent value from your open source or SAS models and help increase your adoption and usage of analytics.

SAS Cloud Modernisation Assessment

What is it?	A roadmap to modernise your SAS systems and processes for the Cloud in alignment with your cloud strategy.
Why do it?	Receive recommendations that will enable you to utilise Cloud infrastructure and services for your SAS platform in a way that aligns to your cloud strategy without adding risk to your current business processes.
How to do it?	A 5-day engagement will enable our architecture consultant to understand your cloud strategy and current SAS architecture and then recommend a clear and actionable set of next steps to modernise your SAS platform into the cloud.
Value	Our assessment will show where you can benefit from the advantages of modernization for the Cloud including the potential to: • Decrease overall TCO for SAS • Improve scalability, resilience and recoverability • Align SAS with your cloud technology roadmap • Make informed decisions by accurately assessing cloud options against alternatives

SAS Reporting & Visualisation Service

What is it?	SAS Report & Visualisation Service offers design skilled consultants with a wealth of experience in delivering top quality reporting and visualisation output. Whatever your output challenges, our consultants can help you deliver beyond your expectations.
Why do it?	Want to present reports, analytics and visualisations that inform, influence, impress and stand the test of time? Don't leave your output to chance. You need people who understand design, UX/UI, and have an ability to drive clear requirements. This combination of skills and experience has delivered highly impressive reporting and visualisation results for some of our customers.
How to do it?	SAS will work with you to analyse, advise, and recommend options and solutions, and then deliver designs that can be built by SAS, or by your own in-house experts.
Value	Define, refine, design and deliver the best possible reporting and visualization results. This can extend to the physical output and prototypes of the actual reports/visualisations.

SAS Data Quality Service

What is it?	SAS Data Quality Service (SDQS) is a cloud-based data quality service, hosted and managed by SAS and delivered using a software as a service (SaaS) model. SDQS offers a rigorous approach to exploring and resolving data quality issues across a client's organisation. Accurate data is essential part of ensuring that organisations manage risks and optimise customer interactions and profitability.
Why do it?	SDQS enables organisations to standardise and improve data so they can trust the information that serves as the basis for their organisation's initiatives and systems. Managers and executives can make better decisions using trusted data. Marketing teams can reduce mailing costs and improve customer experience. Data governance teams can use this service as part of their data governance process and data quality lifecycle.
How to do it?	SAS will work with you to:

- Conduct workshop to understand data quality requirements
- Complete data quality assessment
- Define business rules for data standardisation
- Complete data quality/standardisation
- Review/analyse standardisation results
- Deletion of data from SAS environment

The result will be:

- Data quality assessment report
- Data quality/standardisation
- The business rules applied
- The data quality/standardisation final outputs, in the form of standardised files and reports.

Value	• Get a more accurate view of operations. Reliable, up-to-date, and consistent data gives you a more vivid picture of your operations; you can see what is and is not working. • Minimise unnecessary costs. When the quality of your data is poor, things slip through the cracks, and it is easy to lose track of spending and make costly mistakes. • Meet compliance, mitigate risks, reduce costs often associated with poor data quality.
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SAS Viya Quick Start

What is it?	An installation and configuration of SAS Viya software. The service is performed remotely for a fixed price fee
Why do it?	SAS Viya is part of how we continue to modernise the SAS platform – and complements SAS 9. It is designed to help customers adapt to new and future technology and business demands.
How to do it?	SAS Professional Services will install and configure your SAS platform. This fixed-price, fixed-scope has two options: Option 1 - Remote deployment of SAS Visual Analytics, SAS Visual Statistics and SAS Visual Data Mining & Machine Learning on SAS Viya on up to 10 virtual or physical servers in a non-production environment. Option 2 - Remote deployment of SAS Visual Analytics, SAS Visual Statistics, SAS Visual Data Mining & Machine Learning, SAS Visual Forecasting, SAS Visual Text Analytics, SAS Model Manager, SAS Decision Manager, SAS Data Preparation, SAS Data Quality, SAS Econometrics and SAS Optimization on SAS Viya on up to 10 virtual or physical servers in a non-production environment.
Value	The SAS Viya Quick Start delivers a SAS Viya enabled environment for a fixed price, depending on the software purchased as defined above.

SAS Enhanced Support Services

What is it?	Making an investment in SAS does not stop at deployment – which is why our support consultants are on hand to help you with everything from boosting the efficiency of your SAS system to fixing technical glitches to minimise production downtime. As your investment in SAS grows, our services adapt, connecting you with technical support engineers and statisticians trained in the latest SAS skills and methods. We take a holistic approach to customer care. That means our technical support professionals work closely with software developers, consultants, training personnel and others to provide you with the best answers – and learn from your questions.
Why do it?	Complementary to our Software as a Service offerings, our enhanced support offerings, SAS Premium Support and SAS Elite Support , bring you closer to SAS and provide you with improved response times, increased levels of personal attention and access to a range of additional on-site support services to meet your needs. You will be guided by

a technical support account manager (TSAM) who will be your personal partner and coordinator. Your TSAM will proactively manage your support engagement, helping you benefit from SAS best practice support methods, so you can spend more time focused on generating value from our software.

How to do it?	SAS Premium Support provides direct access to a technical support account manager (TSAM) providing: • Faster response times to resolve technical issues • Enhanced response time SLAs • Proactive technical advice and management of support tracks. • Regularly scheduled meetings and workshops • Regular status reports on your technical support activity SAS Elite Support gives you all the benefits of Premium Support plus: • Major incident management support • Consulting support service hours • Out-of-hours planned support • Unlimited access to e-courses • Discounted SAS training points
Value	Maximise the effectiveness and ROI of SAS software across your enterprise • Receive enhanced support to address your evolving needs • Maximise uptime and outcomes, so you can spend more time focused on providing value to your business • Take proactive measures to mitigate risks • Receive superior levels of support tailored to your needs • Gain expert knowledge and personal attention from a dedicated team of knowledgeable resources • Experience a level of expertise that only SAS can deliver

SAS Digital Insights

What is it? The Digital Insight service offering gives you the ability to collect digital data from online channels to inform business decision-making. This is supported by deriving detailed insight using advanced analytics into customer behaviours across digital channels.

SAS experts provide digital analytics domain expertise and reports to help your marketers understand how your customers are interacting with your brands' digital properties. Real-time changes can be made to improve digital presence and marketing interactions to increase metrics like conversion, retention, loyalty and growth.

Why do it?	Many companies have invested in new digital capabilities but are not easily able to understand the results for insight or decision making. Some of the challenges are: • Translating large volumes of customer behaviour data into actionable information • Performing on/offline identity management for omni-channel customer journey tracking
How to do it?	SAS will facilitate a planning and definition workshop and perform a use case review to guide the configuration of the solution. The configuration will be done on up to three web domains and/or mobile applications and includes the data collection processes and cleansing and preparation of the data for standard static reports, analytical segments, and real-time dashboards for digital insights. The implementation will also include user acceptance testing support and mentoring on best practices and system and solution administration. The following SAS products will be used: • SAS Customer Intelligence 360 Discover (data collection)

- SAS Visual Analytics (reporting)
- SAS Visual Statistics (analytical insights)

Value	The Digital Insights service offer will give you valuable and actionable insights into the way your customers interact with your digital channels and domains. This will help drive and define your digital presence and give you the ability to provide your customers with the best digital experience
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SAS Staff Augmentation Service

What is it?	Cure your contractor headaches with SAS staff augmentation. Since April 2021, changes to the UK's IR35 regulations have created significant challenges for organisations that hire independent contractors for short-term projects. Working with our consultants, SAS takes full responsibility for the tax and National Insurance implications of providing expertise to large institutions on short-term contracts. You get the people you need, and we take care of all the paperwork. And while you could potentially source contractors with SAS skills from other staffing agencies, SAS Staff Augmentation offers several unique advantages:
Why do it?	In cases where the new IR35 rules apply, organisations can be liable to pay income tax and National Insurance contributions for their contractors, just as if they were regular employees. Tracking contractors' hours, tenure and ensuring compliance with IR35 can be a significant administrative burden. Meanwhile, any mistakes could expose you to significant financial penalties and reputational damage. Nevertheless, when you're facing a sudden deadline, such as a regulatory report, you often need to find and hire SAS experts fast. How can you get the right resources on board quickly, without causing IR35 headaches?
How to do it?	Fulfil your short-term resourcing needs while ensuring full compliance with IR35 rules. Please speak to your local SAS Professional Services Engagement Manager
Value	• Near-zero time-to-hire: When you make the call to SAS Staff Augmentation, we'll respond immediately. By calling on our global network of SAS employees and trusted partners, we can get you the resources you need in days, not weeks or months. • Access to world-class expertise: Working with SAS augments your in-house team with highly skilled consultants, and provides access to the SAS global network of world-leading experts on every aspect of SAS software and analytics. There's no question we can't answer, and no challenge we can't solve. Nobody knows SAS software better than SAS. Rest assured that all resources go through an interview and screening process to ensure that they have the appropriate skills to achieve your objectives. • Quick issue resolution: All SAS resources have access to internal specialists and subject matter experts, as well as global support resources, R&D and product management enabling quick resolution of any problems. • Access to personal knowledge, hints and tips: While you benefit from having our consultants on-site in the short term, you can also take advantage of their expertise to help your own team develop their SAS skills. As your expertise grows in-house, you can gradually reduce your dependency on short-term external staffing over time. • The paperwork: Because your organisation uses SAS software, it's likely that we're already set up as a preferred supplier on your procurement system—so there should be no need to go through a lengthy supplier selection process before you make that call.

SAS Attribution Service

What is it?	The Attribution Service offering helps you to develop an analytical attribution program to identify which traffic sources deliver the most value to your organisation. The result will be an established and reusable multi-channel attribution environment with reports, insights interpretation, recommendations for sharing across the organisation.
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Why do it?	Many companies have invested in new digital capabilities but are not easily able to understand the results for insight or decision making. Some of the challenges are: • Knowing when or how a customer reacted to your marketing messages or offers • Identifying which channel to invest in or when to follow up on a customer path that is yet to finish
How to do it?	SAS will run a series of workshops to identify traffic sources, non-digital marketing touchpoints, conversion goals and customer hierarchies. This will guide the configuration of traffic sources, data views, events, and data capture and/or upload processes in the solution. This will be followed by attribution algorithm execution across all channels and sources, the building of results reports and the interpretation of the reports and follow-up recommendations. The implementation will also include user acceptance testing support and mentoring on best practices and system and solution administration. The following SAS products will be used: • SAS Customer Intelligence 360 Discover (data collection) • SAS Customer Intelligence 360 Engage: Digital (optional) • SAS Visual Analytics (reporting) • SAS Visual Data Mining and Machine Learning (analytical insights)
Value	The Attribution Service offer will give you detailed, analytically derived insight into how your customers respond to your messages and marketing offers. This will allow you to focus on the areas that matter to your customers and optimise the way in which you message them for optimal results and improved marketing ROI.

Post Go-Live Kubernetes Enablement Services

What is it?	The role of the SAS Administrator has changed significantly in SAS Viya on Kubernetes. Many administrative tasks now require skills in SAS, and also in Kubernetes and other supporting 3rd party services.
Why do it?	- Failing to keep up to date with the latest release of SAS Viya will render your platform out of support in a short period of time. - Considering moving from SAS 9 and Viya 3.5 to Viya 4, or you are looking to deploy Viya 4 on your own cloud, rather than SAS Cloud. - You do not have or have limited knowledge of Kubernetes expertise, require enablement and knowledge transfer of the skills required to manage and maintain SAS Viya onto both SAS administrators and Kubernetes administrators. - Any sector/industry but note that complex customers are likely to require a more bespoke service and estimate. Requirements gathering phase required.
How to do it?	The new service is broken down into two parts: the standard service, and the optional bolt-ons. The standard service is designed to help plan for success for each SAS Viya upgrade, including performing the first two upgrades on the stable cadence (one upgrade for an LTS customer). The service will also cover how to version control upgrades, and how to roll back in event of a failure. The upgrade process of SAS Viya is non-trivial, the engineer is required to trawl through the upgrade notes of every release since their current version and plan all required infrastructure upgrades in conjunction. The SAS engineer will also pass on the following skills: how to scale up and down SAS Viya (service restarts); how to perform an emergency fix; how to debug and query pods; and how to extract logs for SAS Technical Support. You will be left with a thorough system maintenance document There are two optional bolt-ons that may be suitable for you: Pre-Installation bolt-on - As part of the Pre-Installation bolt on, we will bridge that gap between prerequisites being delivered and the deployment. This includes walking you through readiness checks, ensuring they have the cloud infrastructure in place. We will also provide Infrastructure as Code (IaC) support for downloading, modifying, and executing IaC, and we will help you prepare the software order for a deployment. Monitoring & Audit bolt-on - The Monitoring and Audit bolt-on includes the configuration of alerts and auditing, in addition to helping you get value from the recorded content by illustrating how to extract and analyse the audit information. The scope of this bolt-on has been limited to two days. It is easy to imagine how getting into the weeds of monitoring and audit configuration can soon become a project in itself, as such if you require a more complex configuration, additional days should be purchased.
Value	Failing to keep up to date with the latest release of SAS Viya will render your platform out of support in just four months. SAS Professional Services has developed a service to pass the skills required to manage and maintain SAS Viya onto both SAS administrators and Kubernetes administrators.

Data Governance Service

What is it? Enables organisations to monitor and maintain data quality in accordance with company policies.

- Define data governance roles
- Define and detect data anomalies
- Define and detect sensitive data
- Define and implement data validation rules
- Define and implement data standardisation
- Create dashboard for data quality monitoring

Scope:

- PII identification restricted to identities available out of the box.
- Two tables/files with max 10 columns included in scope.
- Max 15 simple business rules will be implemented.
- Max 4 KPIs per table.

Why do it?

- Trustworthy data for analytics
- Adherence to industry rules and regulations
- Secure processing of sensitive data
- Corrective actions applied to data
- Tracking and reporting through time

How to do it? Assessment of current data validation practices. Deployment and configuration of Data Quality Monitoring framework. Hands-on training sessions on Data Governance methodologies.

For this consultancy to be most effective, active participation from IT, Data stewards and data users is crucial. This includes attendance in workshops, access to current data and processes, and collaboration in tailoring solution to fit unique organisational needs.

Value

- Data Governance structure with defined RACI matrix
- Increased accountability and trust in analytical outcomes
- Accelerated Data Management project implementations with improved standardisation and maintainability
- Consistency across subsidiaries, departments or data management programs

You will be left with a thorough system maintenance document covering everything the standard service touches on but will also include how to update the SAS license, how to perform a backup and restore, and how to refresh certificates. This will be an invaluable document that will become central for all administrative tasks that you perform.

SAS Viya Code Optimisation

What is it? Helping users define complex data pipelines and running them at regular intervals. Reduced execution time for key jobs leading to better cloud optimisation if you are looking to:

- Refactored program(s) optimised for SAS Viya.
- Documentation supporting self-repeatability of the optimisation process.
- Tuning recommendations.

Why do it? Looking for efficiency and optimisation of key jobs needed to meet business requirements and the ability to increase the throughput of jobs within a given window. Optimised and efficient use of cloud infrastructure:

- Key jobs need to meet business requirements
- Ability to increase the throughput of jobs within a given window
- Efficient use of cloud infrastructure

- Determine job patterns and find long running and high value jobs
- Refactor small sample of jobs to use compute services and/or CAS most effectively along with optimised file formats (e.g., Parquet or ORC)
- Apply appropriate tuning and/or workload management (WLM) to environment
- Document best practice approach to allow for future self-service refactoring

How to do it?	Determine long running and high value jobs through workshop with key business and IT experts. Optional Implementation of EcoDiagnosits (ESM) for deeper insights into key workloads. Offline assessment of outputs followed by providing refactoring examples of an agreed sample of key jobs and gather metrics on execution improvements. Apply appropriate tuning or WLM to environment as required. Final set of documented recommendations and best practice approaches for future self-service optimisation/refactoring. Optional execution of further code refactoring and optimisation as required.
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Customer engagement level requirement: High. For this service to be most effective, active participation from IT, and data engineers is crucial. This includes attendance in workshops, access to current data, logs, and processes

Value	• Reduce execution time of key long running jobs • Accelerate time to value • Reduce and optimise cloud costs or increase the overall throughput of jobs • Repeatable approach to allow for self-service optimisation & refactoring
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Cloud Database Optimisation

What is it?	Optimise code for effective processing and network usage. • Organisations need to optimise storage and reuse existing database investments • Customers need to improve efficiency of data access • Customers need to improve performance of existing processes.
Why do it?	Learn existing investments you have in skills and technology subscriptions for which databases/lakes/object stores.

Analyse your SAS dataset estate for access frequency by table, and row subset. Determine usage by type, i.e., SQL, Base SAS, advanced analytics, identifying uses suitable for in database scoring, implicit pass-through, CAS library connections, to those appropriate for high performance, low latency data access, i.e., SAS datasets on local performant storage. Applies to single cloud, hybrid, and multi-cloud scenarios.

How to do it?	Harvest software logs. Stakeholder interviews. Analyse recency and frequency of access by asset. Identify gating IFs, OUTPUT/DELETE, WHERE, KEEP, DROP, etc. statements and options from tables in source libraries. Identify volume of changes to recognise a ROI. Report the potential benefit and change required to recognise the benefit. Propose the project to implement the change.
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Value	• Understand what the SAS/ACCESS product is doing • Tune performance for both SAS and Cloud Native Database • Pushdown analytics reducing data movement • Reduced cost of storage • Reduce duplication of data and silos • Increased access to SAS derived value • Increase governance and lineage • Potential for reduced ingress costs • Transformed programs or flows which optimise the database use for analytics • Documentation supporting the changes applied, support future replication
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Data Migration Service: Profiling

What is it?	Avoiding cloud storage overspend, enables organisations to move their data in a cost-effective way to the cloud and: • Determine data usage patterns • Determine encoding patterns • Recommend approaches to hot and cold data storage options • Define data migration mechanism
Why do it?	Profiling of all available and accessible SAS datasets: • Understand what data is required in the cloud • Migration of data from SAS 9.4 to SAS Viya • Migration of files from on-premises to SAS Cloud • Validate migrated data
How to do it?	Implement Eco-Diagnostics (ESM and CAT) and / or localised scripts. Offline assessment of outputs followed by series of workshops and playbacks. Final set of documented recommendations and approaches. For this consultancy to be most effective, active participation from IT, and data users is crucial. This includes attendance in workshops, access to current data, logs and processes, and collaboration in tailoring solution to fit unique organisational needs.
Value	• Optimal final data storage; optimal both for performance and price • Repeatable, proven and trusted migration process • Remove potential unnecessary code changes • Audit log of all migrated files • A tailored roadmap for moving data to the cloud or connecting back to home data sources

Ethics Guard AI Review

What is it?	Guarding AI's promise with ethical integrity. Ethics Guard AI Review delves deep into the use of AI models and algorithms, identifying potential ethical pitfalls and biases across the analytics lifecycle. Through our comprehensive review service, we point out areas of concern and provide actionable insights and recommendations to ensure the ethical integrity of your AI initiatives. Scope: • One existing AI use case deployed in SAS Viya • Focused collaboration with one analytics team • Limited to supporting, providing feedback and recommendations on implementing responsible AI
Why do it?	• Navigate the complexities of ethical AI amidst evolving global standards • Safeguard brand reputation by proactively addressing AI biases and ethical concerns • Stay aligned with industry best practices while proactively addressing potential ethical challenges in AI • Foster trust and transparency with stakeholders through responsible AI implementations
How to do it?	An Ethics Guard AI Review can help you to identify potential ethical pitfalls, provide actionable recommendations, and empower your team with tailored tools and training for responsible AI adoption. Deliverables: Documentation capturing potential biases, ethical risks, and areas of improvement for an existing (reference) AI use case. A workshop to outline the set of tools and methodologies tailored for the organisation to continuously monitor and detect

biases in AI models and datasets. A referenceable bias detection use case demonstrating the metrics and visualisations with supporting documentation.

Customer engagement level requirement: High. The consultancy's effectiveness is rooted in deep collaboration with the organisation's AI development teams. This collaboration encompasses active participation in audits, receptiveness to feedback, and a shared commitment to fostering ethical AI practices. You will also need to provide the data and AI model from the outset.

Value	- Enhanced public and stakeholder trust in AI applications - Proactive identification of bias to aid mitigation of ethical risks in AI - Alignment with global standards and best practices on AI ethics - Training and knowledge transfer on responsible AI development and deployment
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Rapid ModelOps Deployment

What is it? Streamline the implementation and deployment of machine learning models. Our ModelOps consultancy offers expertise in deploying and managing machine learning models in production environments. Through an assessment of current processes, tools, and models, we provide actionable insights and recommendations.

This service culminates in a tailored deployment strategy aligned with the organisation's specific goals and operational nuances.

Why do it?	- Complete the last mile of analytics - Recognise value from more analytical models - Operationalise models more quickly - Ability to observe model effectiveness, accuracy and trustworthiness
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How to do it? Assessment of current model deployment practices. Recommendations for tools and technologies best suited for ModelOps. Hands-on ModelOps training sessions.

Deliverables: Best practice guide for model validation, versioning, and monitoring. A referenceable use case demonstrating key concepts throughout the analytics lifecycle. Ongoing support and guidance post-implementation.

Customer engagement level requirement: High. Active participation from both data science and operations teams is crucial. This includes attendance in workshops, provision of access to current tools and processes, and collaboration in tailoring solutions to fit unique organisational needs. You will also need to provide the performance data in an appropriate format and put forward a candidate model for the engagement.

Value	- Accelerated time-to-value for machine learning initiatives - Reduction in operational inefficiencies and risks associated with model deployment - Enhanced model performance, reliability, and scalability in live environments - Empowerment of data science and operational teams through knowledge transfer and best practices
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Elevate the Analyst Blueprint

What is it? Our consultancy service for model creation provides analysts with the tools, techniques, and strategies needed to produce top-tier analytical models. We start with an assessment of current practices, followed by hands-on training sessions and the provision of a comprehensive best practice guide.

Why do it?

- Elevate analytical proficiency in a fast-evolving data landscape
- Derive sharper, more actionable insights from diverse data sources

- Stay ahead with modern tools, techniques, and methodologies
- Ensure robustness, relevance, and reliability in analytical models

How to do it?

Evaluation of current analytical practices and methodologies.

Training sessions on modern analytical tools, techniques, software and working in high performing analytics team. Guidance on data pre-processing, feature engineering, and model validation. Hands-on workshops on implementing the latest modelling techniques.

Deliverables: A tailored roadmap for continuous skill enhancement and model improvement. Access to three use cases, each designed to demonstrate key concept, software components and best practices for the analytics journey.

Customer engagement level requirement: High. Success hinges on active participation from the organisation's analytical teams. This includes involvement in workshops, openness to adopting new practices, and a commitment to continuous learning and improvement.

Value

- Enhanced accuracy and predictive power of analytical models
- Streamlined model development processes ensuring efficient use of resources
- Modernisation of analytical capabilities, making the organisation more competitive
- Training and knowledge transfer, ensuring internal teams stay updated with evolving best practices