

SAS: Viya

The Company

SAS Institute Inc. is a privately held software company that was founded in 1976. Its co-founder, Jim Goodnight, is still the CEO and major shareholder today. Its data management and analytics software has broad coverage, including data quality, data science, advanced analytics and artificial intelligence. SAS Viya is the name for its flagship software platform, based on a cloud-native architecture. It is global in scope, with over \$3 billion in revenue and operations in over 60 countries.

SAS Institute is headquartered in Cary, North Carolina
 Visit their website: www.sas.com

Company Name Global Presence & Financial Strength

>\$3B+	145	12,000+	80,000+
Annual revenue	Countries with customers	Employees	Corporate customers

The Market

SAS has a broad data management platform, focusing on advanced analytics. It has a range of industry-specific solutions in addition to its core Viya platform, with solutions for credit risk, fraud, compliance, customer intelligence, marketing and healthcare, amongst others.

Overview

The SAS Viya platform covers the analytics lifecycle, from data profiling and data access and ingestion through to model deployment, management and monitoring. Viya replaced its previous SAS 9 software stack. It is cloud-native and supports containerisation via Kubernetes. It is micro-services-based and can be deployed in public cloud, private cloud, on-premises or hybrid environments. It has a broad range of data access capabilities, extensive data quality capabilities, data governance, extensive analytics and model management. It has an AI co-pilot capability and supports natural language interaction as well as the orchestration of multi-step analytic tasks.

Key Features:

Advanced Analytics	Data quality management	Machine learning and AI platform	Visualisation and reporting suite
Handles big data, streaming data and in-memory processing, with a deep range of statistical and optimisation algorithms.	Comprehensive and proven data quality management capabilities, from data profiling through to data enrichment.	Automated machine learning with natural language processing and text analytics as well as decision automation.	Extensive tools for interactive dashboards, reporting and data exploration, visualisation and support for alerts

The Technology

SAS offers a broad data cloud-native management platform, in addition to an extensive range of industry-specific applications and solutions. Its data quality features are well proven and integrated within the broader data management platform. Its functionality is considerable, from data profiling through to the access and manipulation of data, through to its deep analytics capability. High performance is a common theme, with its in-database execution of analytics functions as just one example of this. SAS Viya supports complex data pipeline management and an ongoing support framework for data science models, from their design and deployment through to ongoing monitoring and governance. These models include machine learning models but also other AI models such as large language models. SAS has a

comprehensive catalogue of statistical and machine learning procedures, covering forecasting, optimisation and natural language processing. In the data quality arena, SAS offers data profiling, outlier detection, pattern recognition, data cleansing and standardization, rules-based transformation and data enrichment. It also supports data record matching and deduplication, entity resolution and column level data lineage, and integrates these into data governance. It can automate data quality tasks at scale, and ties data quality directly into analytics and AI workflows. It also has pre-built data quality rulesets and templates for specific industries like banking, insurance and healthcare. SAS has machine learning algorithms for supervised and unsupervised learning that can be embedded into operational processes.

Competitors

SAS competes against other analytic platforms, including Snowflake and Databricks, as well as analytic vendors such as Qlik, Tableau and Alteryx. In the data science field, competitors include Dataiku and the offerings from the hyperscalers such as Amazon and Google.

Summary

SAS is a long-established leader in advanced analytics, with a global customer base and fifty years of experience in the field. It invests heavily in research and development, as can be seen in its extensive AI capabilities. SAS should be on the shortlist for any enterprise looking for a powerful, proven data management and analytics platform.

Market Differentiation:

- Completeness of offering.
- High performance.
- Strong governance and trust features.
- Depth of analytics capability.

“Thanks to SAS Viya we now have a deeper understanding of real world vehicle conditions and customer behavior”

Enrica Vacarini, Snr Manager, Iveco
Executive of Sound Projects

About The Information Difference

At the Information Difference www.informationdifference.com, we offer in-depth analysis of the data management industry, in-depth analysis of the main vendors, assessments of the marketplace and white papers discussing key issues and best practices.

If you are contemplating a data management project, we can advise you on strategy, vendor selection and best practice.