Leading in data and AI

2023 Annual Report
and Corporate Overview

2023 Overview

SAS continues to record more than $3 billion in annual sales.

Analysts rank SAS as a leader in:

- AI
- machine learning
- data science
- predictive analytics
- risk management
- data quality
- decisioning
- cross-channel marketing hubs
- customer analytics
- fraud management
- anti-money laundering

Sales by region

- Asia Pacific: 13%
- Americas: 51%
- Europe, the Middle East and Africa: 36%

8%
total sales growth

9%
SAS® solutions sales growth

30%
Cloud sales growth

30%
SAS® Viya® sales growth

90%
of Fortune 100 companies
or their affiliates are SAS customers*

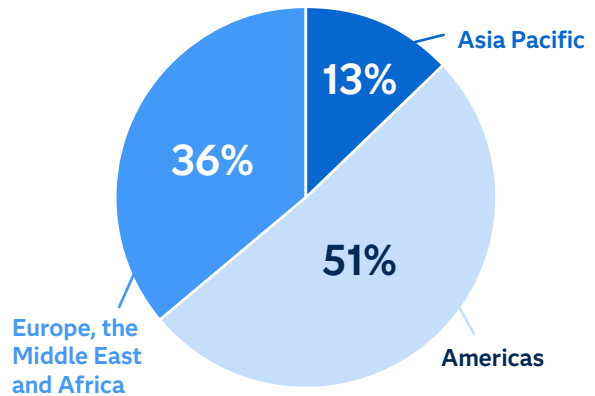average over past five years

Leader in Innovation

Recognized for innovative technology and social innovation projects by Fast Company, the American Business Awards, PRNews and more.

Leader in Culture

Recognized for world-class culture and inclusive workplace practices by Forbes, the Human Rights Campaign Foundation, Disability:IN, Newsweek and more.

Metrics in this report include amounts and percentages determined on a management reporting basis, which may differ from GAAP reporting.

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From the CEO

In today's rapidly changing world, organizations recognize that a critical factor in outpacing the competition is making decisions faster. But the environment for decision making is much more complicated than before – bogged down by economic volatility, evolving customer behaviors and the overwhelming effects of a fast-moving technology landscape.

To make sense of the complexities and stay ahead, businesses must leverage AI to scale human productivity and decision making. As a pioneer and leader in this space, SAS has been helping customers use data and AI to grow their businesses, deliver exceptional customer experiences and operate more efficiently for nearly 50 years. When organizations are looking for answers they can trust and a long-term partner they can trust, they turn to SAS.

In 2023, we continued to make strategic, innovative advancements to our products, including our SAS Viya cloud-native and cloud-agnostic data and AI platform, as well as our dedicated solutions designed to address the needs of specific industries and cross-industry functional areas like fraud intelligence, risk management and marketing. With new and improved capabilities, including generative AI and data management, we have made it even easier for customers to build future-ready systems that will improve business models and transform markets. These efforts led

to notable growth in our strategic focus areas last year. We saw 30% growth in cloud revenue, marking our fourth year of double-digit cloud growth. Plus, we recorded 30% growth in SAS Viya revenue. We will build on this momentum in 2024, continuing our commitment to giving customers choices in the cloud with SAS-managed and self-managed deployment options on the platform of their choice and new Viya capabilities that deliver increased flexibility and efficiency.

Delivering productivity, performance and trust with SAS Viya

At SAS, we know the key to outpacing competition is software that delivers on productivity, performance and trust. SAS Viya is our foundation for delivering this promise. Viya is our most modern data and AI platform, designed to optimize and accelerate the entire data and AI life cycle – from data pipelines to model development, to model management, to deployment, all the way to monitoring model performance – helping customers find quick answers to tomorrow's questions.

Providing customers with the choice and control to run AI and analytics wherever and however they need, SAS Viya helps users across the organization innovate faster, scale and realize cost savings. In fact, a 2023 analysis from the Futurum Group found that SAS Viya is, on average,

30x faster and scales better than several leading commercial and open source tooling alternatives. The speed and scalability of Viya can also help lower cloud operating costs by more than 86% when compared to alternatives. If you're running analytics in the cloud, SAS is your most economical solution.

In 2023, we also announced upcoming expanded capabilities to Viya, including SAS Viya Workbench. The cloud development environment will help data scientists and developers create high-performance, production-ready models in their language of choice, offering unmatched flexibility, scalability and speed.

Strengthening solutions

Built on top of the Viya platform, our award-winning industry solutions are mission-critical to businesses around the world. SAS has invested for decades in our domain expertise across our full solutions portfolio. Our solutions are tailored to unique industry needs, helping organizations uncover trusted insights with speed and efficiency. Newcomers to the AI space would be challenged to replicate the breadth and depth of industry experience we've amassed.

Last year, innovations across our solutions suite led to 9% solutions revenue growth and garnered impressive analyst validation with 35 analyst reports recognizing SAS as a Leader across areas like AI, analytics, customer intelligence, risk, fraud and security intelligence. We also committed $1 billion over the course of three years to further develop cloud-first advanced analytics solutions, including integrated trustworthy GenAI capabilities for specific industries, such as banking, government, insurance, health care and more.

Delivering trustworthy generative AI value

The world has shown excitement – and skepticism – about the rise of GenAI and large language models. SAS believes GenAI is powerful. But on its own, it cannot solve business tasks. To deliver real-world value, it needs to be orchestrated, governed and safely embedded to augment organizations' existing IP. As we look to release additional integrations and capabilities as part of our $1 billion solutions investment, we will work alongside partners to deliver productivity gains for customers while providing trusted and secure guardrails in the development and deployment of GenAI.

Innovating responsibly

From the beginning, SAS has seen firsthand the impact that our technology can have on improving our world. Through decades of social innovation projects tackling global problems, including protecting the future of our environment, improving health outcomes and addressing unfair bias, we believe in the power of using data for good. We also continue to support our customers in using that same technology ethically and responsibly. As the world changes around us, SAS is primed to help our customers navigate GenAI safely for new levels of productivity and innovation.

Accelerating with partners

Our partner ecosystem plays a critical role in helping our customers unlock maximum value, complementing our deep analytics experience with their cutting-edge technology and industry knowledge. In 2023, we deepened collaborations with technology partners, making our software available on partner marketplaces, such as SAS Customer Intelligence

on AWS Marketplace and our new SAS Decision Builder on Microsoft Fabric. Building on decades-long partnerships, we continued elevating our trusted global systems integrators to maximize and accelerate customer value. We also established agreements with global distributors for SAS solution provider partners, helping ensure partners are fully enabled and supported by a distributor with a strong presence in every geography where we operate. Together with our partners, we help accelerate customer decision making, strengthen innovation and build resiliency.

Cultivating world-class culture and talent

At the heart of everything we do is our people. By providing an exceptional employee experience with meaningful work, an inclusive culture and world-class environments, we attract and retain top talent. Our deep domain expertise, as well as our ability to innovate and deliver great customer experiences, are keys to our success. Our investment in our employees, including emerging leader programs, tuition assistance and technical training, helps maintain this high-performance culture. We are recognized each year for our workplace experience and the innovation it helps inspire by organizations like Fast Company, Forbes, the Human Rights Campaign Foundation, the American Association of People with Disabilities (AAPD), Disability:IN and many more.

Looking ahead

The intensity of today's environment requires organizations to navigate AI with confidence, which requires resilience, agility and a trusted technology partner who knows this race better than the rest. To help customers stay ahead, we will continue investing in the productivity, performance and trust of our software and solutions in 2024 and beyond.

We invest in the technologies and services that our customers will need in the years ahead and provide them the continuity and stability to make transformative investments. For example, as GenAI continues to offer new possibilities for both developers and users of AI, our ongoing investments in trusted GenAI integration will help customers optimize their processes and enhance their competitiveness. We will also continue our investments in data management. We're seeing explosive data growth as digital transformation progresses and GenAI usage expands. SAS is in a unique position to innovate new ways to manage and analyze that data. Our cutting-edge data management capabilities combined with GenAI will help customers spend less time preparing their data and more time analyzing, accelerating time to value.

As we have since our inception, SAS is continuing its relentless pursuit to help businesses use data and embedded AI capabilities to scale decision making and outperform competition.

Jim Goodnight | CEO | SAS
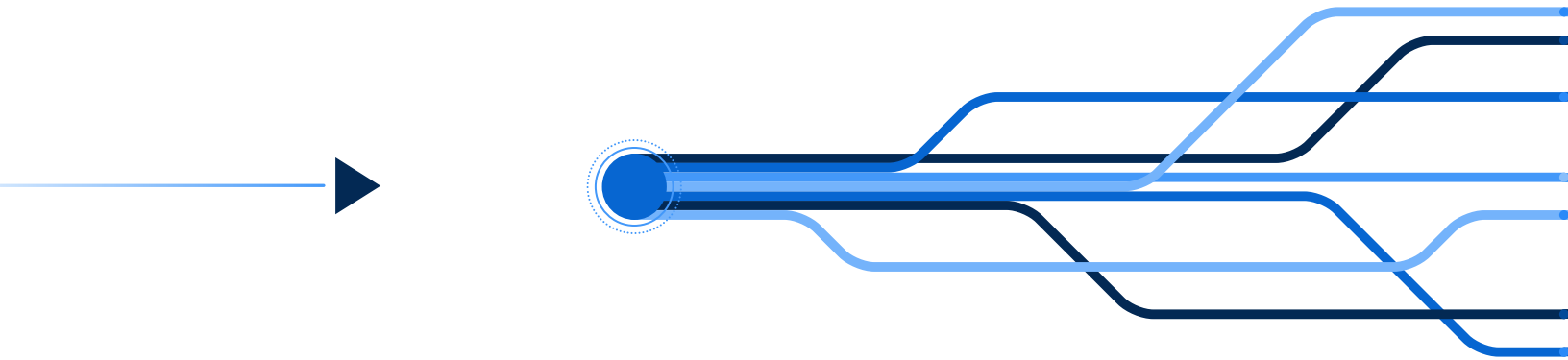
Leading in data and AI

Today, progress is a rapidly evolving path where the magnitude of change has been amplified by a single catalyst: technology.

While technology has propelled many industries forward, its overwhelming effects are felt at both the organizational and individual levels. Organizations are dealing with the complex effects of technology's ever-changing nature. And for people, the flood of data has ushered in an era in which information is far exceeding human capacity.

It's clear that it is no longer enough to be data-driven. To meet the challenge and capitalize on the opportunities, today's organizations need to be outcome-driven, using AI to improve and accelerate decisions they can trust and tapping

into GenAI to lower barriers to adoption. As one of the first analytics companies and a long-term leader in data and AI, SAS is distinctly primed to help customers across industries outpace the change to outperform competitors.

It starts with a faster, more productive data and AI platform. Our cloud-native, cloud-agnostic SAS Viya platform is designed to help optimize and accelerate the entire AI and analytics life cycle, helping customers get more done in less time. We are using GenAI to make AI more accessible, improve productivity for both developers and users, and deliver better outcomes. These features, and all the capabilities of Viya, help deliver on three critical qualities – performance, productivity and trust – enabling knowledge in the moments that matter most.
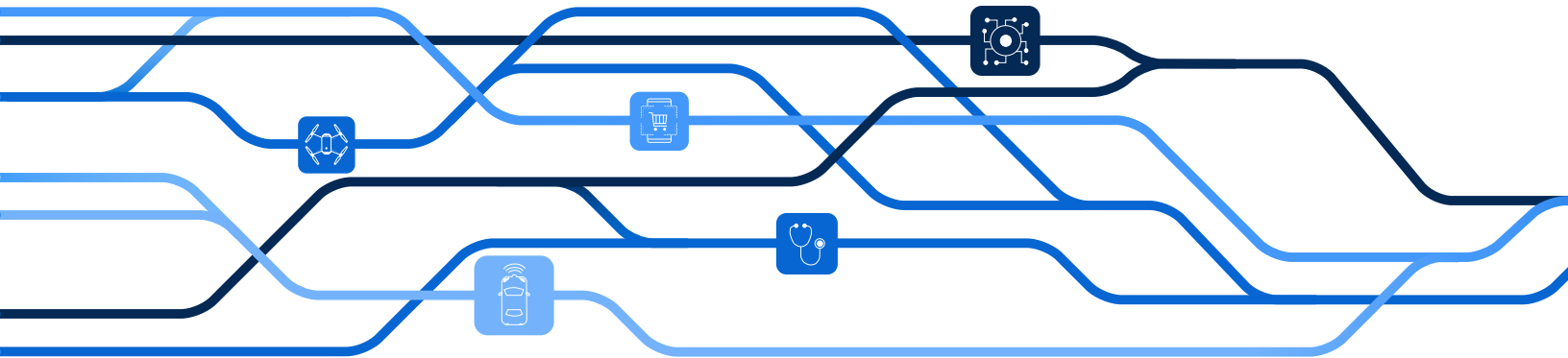
Built on top of Viya and combined with decades of industry domain expertise, SAS solutions are uniquely apt to help industry leaders accelerate trusted decision making. Our specialized solutions with purpose-built domain and industry IP inside are mission-critical to many businesses we all interact with regularly. From retailers keeping shelves stocked with our favorite products to credit card companies flagging fraudulent purchases, SAS industry solutions affect us all and help industries get the most value out of AI and data.

We bring Viya and our award-winning solutions to customers of every size – from top Fortune 500 companies to small and midsize businesses to the public sector – and run where they need us, whether it's in the cloud of their choice, on-premises or at the edge. Our impact is extended with our network of more than 1,700 partners globally who help bring our products to life.

As we've evolved and innovated to help customers do the same, what hasn't changed is our commitment to being a responsible business partner and corporate citizen. We have always thoughtfully considered our environmental, social and governance practices, and we seek new ways to ensure a sustainable and ethical impact. Our dedication to leaving the world better than we found it continues through to our efforts empowering the next generation of data scientists. And as a workplace culture pioneer, we continue to put our employees at the heart of all that we do, providing a meaningful environment that inspires innovation and creativity to move us all forward.

Delivering productivity, performance and trust with SAS Viya

SAS Viya helps organizations navigate the complete AI and analytics life cycle to get more done with a faster, more productive data and AI platform. In each step of the life cycle, Viya provides the scalability and flexibility needed to unlock new levels of productivity and innovation. The insights created by Viya help business leaders make better decisions – whether those decisions affect interest rates for securing a car loan, required maintenance that keeps a rail company's trains safe or a retail distribution center's timing for shipping a pallet of merchandise.

SAS Viya delivers significant productivity gains to organizations using AI, improves performance while uniquely lowering the total cost of ownership in the cloud and enables trustworthy decisions that are explainable and transparent. In fact, a benchmarking study issued in 2023 revealed that the Viya platform is 30x faster, on average, than commercial and open source alternatives and scales better with larger and more complex data. Additionally, the study from The Futurum Group highlighted that Viya is 86% more cost-effective than commercial, cloud-based data and AI platform and open source alternatives like H2O and SparkML.

The report noted that Viya produced results in minutes while competitors ran for hours or simply failed. Plus, it reported that Viya helps users lower computing costs and consider more data to drive intelligent decisions faster – a position that's ahead of competitors.

By integrating with numerous programming languages and data sources, users across business roles and skill sets can take advantage of our best-in-class AI. Meeting customers wherever they are, Viya is available on the Microsoft Azure Marketplace, Amazon Web Services, Google Cloud and Red Hat OpenShift. Last year, we also announced our plans for a new offering, SAS Viya Workbench, which will be available in the first half of 2024. Workbench, a lightweight development environment that quickly spins up and executes code in a cloud-native, efficient and secure way, enables users to rapidly build highly performant and production-ready models in their preferred coding language.

The powerful, easy-to-access SAS Viya platform helps customers quickly, confidently and securely advance productivity and innovation while bringing powerful SAS technology into the hands of everyone, everywhere.

InfoWorld
Technology of the Year
— 2023 —
SAS Viya
AI & Machine Learning: Development

SAS Viya was recognized by InfoWorld as the 2023 Technology of the Year award winner for AI & Machine Learning: Development.

Jakarta Smart City uses IoT analytics to better serve residents

An epicenter for commerce, tourism, politics and jobs, Jakarta, Indonesia is the largest city in Southeast Asia and one of the most densely populated cities in the world. In the past, the government of Jakarta faced data challenges with its legacy public records system. Unstandardized data was scattered across siloes, which made accessing the right data difficult and slowed decision making.

To better meet the needs of its residents, Jakarta decided to prioritize digital transformation and cutting-edge technology. To achieve its goals, Jakarta Smart City – a regional public service agency under the government's Department of Communication, Informatics and Statistics – established Jakarta Kini (JAKI), a one-stop digital platform and super app for multiple government services. When the COVID-19 pandemic hit, Jakarta Smart City used the disruption as an opportunity to fully embrace digital transformation.

On a mission to enhance public services, the city recently partnered with SAS to develop an analytics platform that would integrate with the JAKI app. Jakarta Smart City implemented advanced analytics, AI, machine learning and Internet of Things (IoT) solutions on SAS Viya. The new system standardizes data and integrates millions of data points into digestible information that can be used for decision making.

Combining the super app with SAS Viya set the stage for Jakarta to create an integrated city that connects government, residents and businesses. Now the people of Jakarta can rely on JAKI as their one-stop shop for accessing public services and updates on safety, transportation, health, education and more.

"Given the growing needs of citizens worldwide, digital is the way to go to develop solutions more accurately and instantly. This partnership with SAS has helped Jakarta City Government serve its people better and further elevate the resilience of Jakarta residents."

Yudhistira Nugraha | Director | **Jakarta Smart City**

Innovating responsibly

The rise of powerful AI technologies has sparked global conversations around the risks and opportunities of AI.

SAS is committed to working with customers, partners and academia to increase the awareness of the necessity for technology that is ethical, equitable and sustainable for individuals and societies. The SAS Data Ethics Practice is a cross-functional team that leads a globally coordinated effort to help employees and customers deploy data-driven systems that promote human well-being, agency and equity.

As industries and governments strive to ensure the responsible use of technology, SAS trustworthy AI experts frequently provide counsel and testimony based on nearly 50 years of helping customers use data. In the US, SAS collaborates with other committed organizations, including the US Department of Commerce National Institute of Standards and Technology AI Safety Institute Consortium, EqualAI, AI4All, the Business Roundtable and other groups. Around the world, SAS works with regulators and policymakers to help shape AI laws and policies, including consulting with the EU and EU Member States to inform policies and the legislative process related to trustworthy AI.

SAS also engages with policymakers in Asia Pacific countries such as Singapore, Australia and Japan. For example, SAS collaborated with the Monetary Authority of Singapore-led Veritas consortium to integrate the Veritas Toolkit into the company's AI solutions for the financial sector. Additionally, SAS joined the Commonwealth AI Consortium, which includes global tech firms, research institutions, nonprofits and at least six Commonwealth member countries, which have stepped forward to champion AI innovation.

SAS also supports responsible innovation through the trustworthy AI features of SAS Viya, including bias detection, explainability, decision auditability and model monitoring, governance and accountability that help organizations identify potential bias during data management and modeling.

SAS will continue to lead important responsible innovation conversations, while also working with and learning from customers, partners, academics, students, community organizations and nonprofits, to inform its own practices and explore new ways to empower people with data and AI.

Accelerating business productivity with trusted generative AI

GenAI has captured the world's attention, not merely as an advancement of AI but as transformative technology reshaping how businesses innovate, operate and deliver value. As organizations continue to experiment with GenAI, SAS recognizes that real business value comes when integrating it as part of existing IP and business strategy while ensuring a trusted and ethical application. As one of the most experienced data and AI companies, SAS is equipped to help organizations confidently succeed in their GenAI journeys, across industries, regulatory scenarios and applications areas.

SAS Viya enables organizations to integrate large language models as part of their existing business processes, enhancing governance, regulatory compliance and innovation. We are also continuing to invest in the GenAI capabilities of Viya, including a conversational experience with industry-specialized intelligent assistants and synthetic data generation in a low-code/no-code approach to address data enrichment and data privacy challenges in a trusted way.

For example, financial institutions can integrate SAS' GenAI solution to analyze and augment financial documents that are part of complex credit review processes, reducing time to approval without impacting credit risk or regulatory obligations. Manufacturers can leverage a GenAI-powered interface to better understand the optimal level of raw materials to maximize profits while maintaining high production quality. And a pharmaceutical company can generate synthetic patient data to simulate clinical trials based on existing data sets, accelerating the trial design process while addressing data privacy and bias concerns.

SAS is also working jointly with Microsoft to develop a GenAI integration that combines the scale of Microsoft Azure OpenAI with SAS' existing analytics. With a shared commitment and approach to responsible innovation, we aim to help customers improve productivity and trusted decision making.

"GenAI represents a new age of human productivity and scientific discovery. SAS' goal is to scale the integration of GenAI into our portfolio and democratize access across our platform, solutions and models."

Bryan Harris | Executive Vice President and Chief Technology Officer | **SAS**
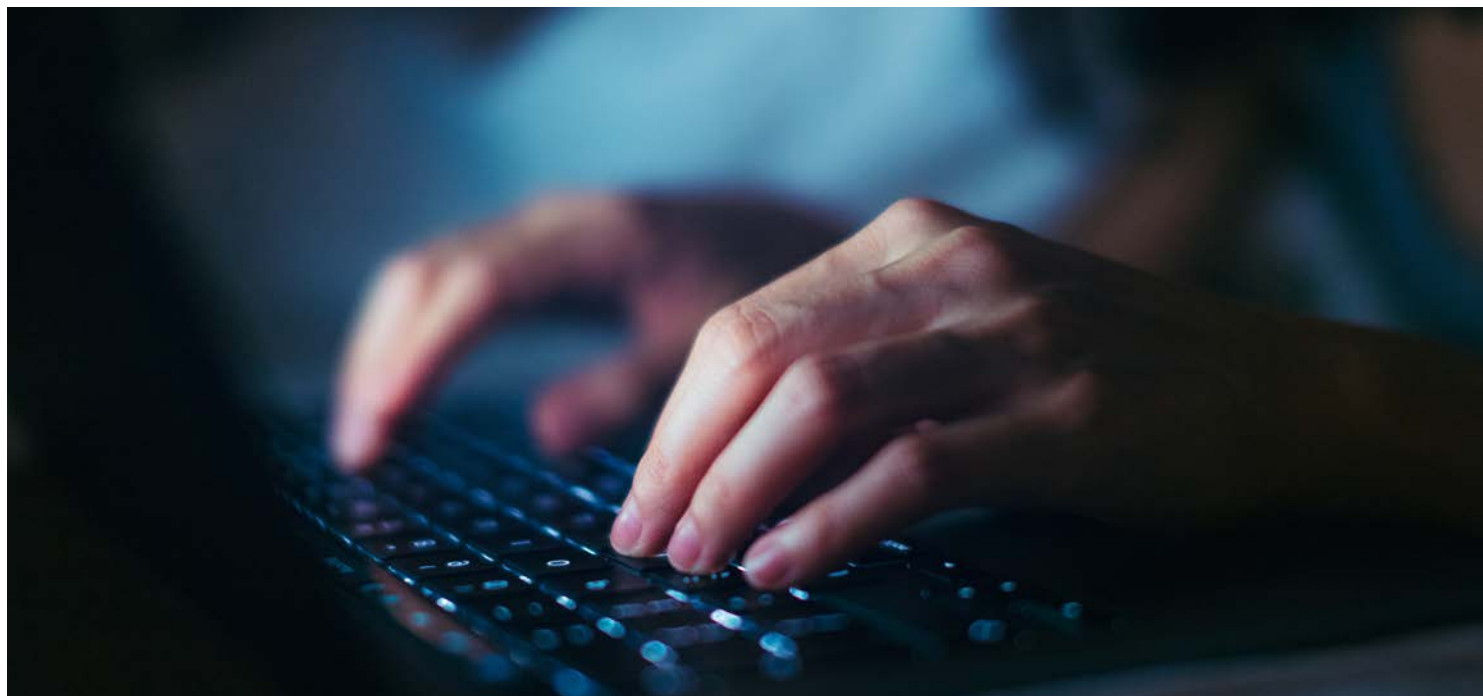
Building industry resilience with SAS solutions

Built on top of SAS Viya and combined with decades of industry domain expertise, SAS solutions are designed to help organizations accelerate time to value today and capitalize on tomorrow's opportunities. With purpose-built AI, business user workflows and industry data models built inside the solution, we help solve unique industry challenges with speed and efficiency. Whether building a solution for a specific industry, or one to reduce risk, fight fraud and improve customer insights across industries – we help today's business leaders drive better decisions, promote resiliency and stay ahead of the competition.

Our **fraud** solutions provide organizations with a unified approach to fraud, compliance and security, helping fight fraudsters and safeguard reputations and bottom lines. SAS' fraud, anti-money laundering and security intelligence solutions provide proactive protection backed by domain expertise and best-in-class analytics. With recognition, including being named an enterprise fraud solutions leader by Chartis for all 10 years since the

RiskTech Quadrant's debut, we continue to solidify our position as a leading force in the fight against fraud.

No matter how a financial institution prioritizes **risk**, SAS has proven methodologies and best practices to help establish a risk-aware culture, optimize capital and liquidity, and meet regulatory demands. We continue to invest in our risk management solutions, as seen by integrating the power of Kamakura Corporation after our 2022 acquisition and our $1 billion investment in industry AI solutions. Our customers and analysts take note of our innovative solutions – SAS climbed to No. 2 in the Chartis RiskTech100® and won seven category awards, among other analyst recognition.

When it comes to **customer intelligence**, SAS' modern multichannel marketing hub helps organizations individualize every interaction in real time. SAS Customer Intelligence 360 has embedded customer data platform capabilities that enable organizations to seamlessly collect, enhance, extend and activate

customer data. SAS 360 Match is a first-party ad server that allows organizations to build their advertising ecosystems where they control the ability to plan, manage, forecast, serve, optimize and measure all ad inventory across digital platforms. This enables use cases such as media and data monetization, retail media network creation and execution, and dynamic ad personalization. SAS Customer Intelligence is a leader across five analyst evaluations, including Forrester Wave evaluations for AI decisioning, customer analytics, cross-channel marketing hubs, real-time interaction management and digital intelligence platforms. SAS is the only vendor that has been a leader in every Forrester Cross-Channel Marketing Hub evaluation since the inaugural report in 2008.

Built on our scalable, open analytics platform, SAS **IoT** solutions help industry leaders create and sustain true value from diverse IoT data and initiatives – whether that data is at the edge, in the cloud or anywhere in between. From visualization and statistical modeling to descriptive, predictive and prescriptive analytics, SAS delivers deep expertise in IoT analytics to help reduce risk and maximize value. From livestock monitoring to flood prediction and preparedness, SAS and our leading-edge partners enable transformative IoT and AI solutions to drive decisions in critical moments.

Across industries, organizations everywhere and of all sizes rely on SAS to fuel growth and drive change, but those industries with early, heavy AI adoption are seeing some of the most impressive transformations: **banking, insurance, life sciences** and the **public sector**.

Transform banking

Banking's metamorphosis continues, shaped by a powerful combination of evolving global macroeconomic conditions, access to expanded technological capabilities, shifting customer expectations, enhanced regulatory requirements, and a perennial need to deliver improved shareholder value. Against this backdrop, it is essential for banks to take full advantage of their data as they transform into hyperintelligent, AI-driven organizations that provide trusted customer experiences, while simultaneously addressing risk, fraud and compliance mandates.

Over the past five decades, SAS has delivered proven value to financial services customers, unlocking AI's vast potential for organizational transformation. To ensure success in an evolving digital world, we help firms apply AI, analytics, cloud, open banking APIs, fintech and regtech technologies to outpace competitors while continuing to manage increasing regulatory demands. To stay ahead of evolving fraud schemes, our customers turn to our embedded AI and machine learning techniques to hunt for fraudulent transactions in real time. SAS continues to integrate the power of Kamakura Corporation, a leading provider of risk management software and data acquired in mid-2022. This strategic acquisition helps us deepen our integrated risk solutions and serve additional facets of the financial services industry, helping better prepare more customers for any challenge ahead.

Across various aspects of banking, SAS helps business leaders make smarter decisions, unlock AI's vast potential and successfully transform to better future-proof their organizations in an increasingly digitalized world.

Orange Bank stays ahead of emerging risks and changing regulations with a cloud-based sanctions-screening solution from SAS and Neterium

When Orange Bank came on the scene in November 2017, it disrupted the traditional banking model by offering customers a mobile-first, 100% digital banking experience.

As Orange Bank grew, it sought to streamline its risk and fraud tools and ultimately monitor risk in real time. The move to real-time sanctions screening is aimed at strengthening the bank's safeguards for anti-money laundering and countering the financing of terrorism while also streamlining the various tools used and managed by its analysts.

To meet local and international compliance regulations, Orange Bank developed a next-generation sanctions-screening solution with SAS and Neterium. The solution provides automated entity and transaction screening against major government and global watchlists, as well as politically exposed person lists.

Over nine months, SAS and Neterium collaborated to align Neterium's cloud-native, real-time watchlist screening service with SAS Visual Investigator. The solution developed by SAS and Neterium enables the bank's compliance teams to strengthen its safeguards against financial crimes while providing a more efficient and streamlined tool for its analysts.

"Our new AML/CFT platform, powered by SAS and Neterium, is already a game changer. I am convinced that this solution will substantially increase our effectiveness and efficiency. Likewise, I am confident that we have chosen the best technology partners to continually improve our integrated compliance platform."

Véronique McCarroll | Deputy CEO | **Orange Bank**

Reinvent insurance

Like many others, the insurance sector has been undergoing radical change, driven by growing customer experience expectations and opportunities presented by digital innovation. To make sense of their data and stay ahead of the competition, insurers know they must leverage AI. They must provide personalized, trusted customer experiences and innovative risk solutions while managing costs and meeting compliance requirements.

To navigate these tides of change, insurers turn to SAS and our advanced, cloud-native analytics for customer marketing and servicing, pricing and underwriting, claims and fraud management, as well as compliance and financial management to deliver quick wins and rapid ROI.

For more than four decades, SAS has delivered consistent value to the industry and its leaders. Around the world, insurance companies of all sizes rely on SAS to build a better customer experience, help detect and prevent fraud, optimize risk and pricing management, and prepare for tomorrow's challenges.

As UTWIN's insurance business grows, SAS Viya enhances efficiency and democratizes analytics among management, business teams and partners

UTWIN, a fintech startup in France specializing in borrower insurance, is making a name for itself through innovations in the digital subscription model. Since its inception in 2015, its mission has been to simplify the subscription process and make borrower insurance accessible to all by offering competitive, personalized insurance solutions.

The company relied on SAS® Enterprise Guide® for data consolidation and analysis for years, but with a steady 20% annual growth rate, it needed a new tool for companywide access to data insights and visualization. In 2023, UTWIN decided to migrate to SAS Viya to meet this need and

improve decision making – all while preserving its global data consistency.

Today, the data team offers its services to management, business teams and UTWIN partners. To support decision making, the data team supplies key performance indicators (KPIs) that help senior leadership and managers make strategic plans for the company. From an operations angle, the team provides detailed follow-up with internal teams and partners. Analytics makes it possible to monitor KPIs specific to the world of insurance, such as the state of claims and the correlation with the premiums requested. As such, UTWIN works with its actuarial services and those of its insurance partners.

As UTWIN grows, the data team is looking for ways to open its analytical platform more widely to users while also preserving data consistency. The team is now exploring how UTWIN can use analytics to combat risk and fraud.

"Our move to SAS Viya represents a real leap forward in data visualization. Now we can make analyses available to a wider audience without having to use third-party restitution tools, all while keeping the data analyst at the heart of the process."

Florence Vuillet | Data Director | **UTWIN**

Accelerate innovation in life sciences

The future of health starts with trusted AI and analytics powered by timely and relevant data. Across the health ecosystem – from drug discovery to clinical trials to patient care and effective hospital operations – data is the lifeblood of a healthier future.

SAS works closely with our health and life sciences customers to unlock insights into their data through tailored industry solutions built on SAS Viya. SAS helps customers innovate to improve health outcomes, enhance operational efficiency, improve health equity and drive better, safer therapies to market faster in a highly regulated and competitive landscape.

In 2023, SAS released two new health care and life science solutions that reflect our commitment to industry investments in our products and services. The first, SAS Health, is an end-to-end enterprise solution for data integration, data management, automation and analytics.

As health organizations expand their analytic governance and open platforms for innovation, SAS Health is a catalyst for breakthrough insights. In the life sciences industry, clinical trial enrollment targets are often missed because the methods used to create the plans are based on assumptions and static projections. Our new solution, SAS Clinical Enrollment Simulation, was created to address this critical need, using robust simulation to inform enrollment planning.

GenAI will accelerate opportunities to achieve a healthier future, which is the shared vision of SAS and our customers in health care and life sciences. Together, we deliver better health outcomes for more people around the world.

Getting ahead of the next pandemic with AI and machine-learning fueled drug discovery

Coronavirus. Alphavirus. Flavivirus. These and other virus families are keeping virologists up at night for their pandemic potential and lack of vaccines or treatments. READDI, a public-private biotechnology company, uses historical and medical data, analytics and AI to identify which virus families are most likely to cause major outbreaks of new viruses and develop new antiviral drugs before they are needed.

READDI has partnered with SAS since 2021 to apply the most advanced technologies to transform the drug development process. The goal is to develop broad-spectrum, small-molecule antiviral drugs before they're needed, instead of starting from scratch when a new virus emerges. READDI's antiviral expertise combined with SAS technology not only prepares for future viral outbreaks but also brings more power to develop better treatments for existing viruses, such as COVID-19.

The partnership evolved to include cloud-based AI and machine learning, which help READDI teams discover drugs faster while fostering secure collaboration between research partners. READDI and SAS use analytic platforms and AI models to rapidly cycle through and find the best small-molecule compounds. What began as developing broadly active antivirals could become more targeted as READDI's understanding of each patient's drug response grows.

"The work we've been doing with SAS is going to change the way we think about viral diseases. Understanding how the host response drives disease is opening a new world of precision therapeutics in antivirals. We're creating a fundamental paradigm shift in how we approach treating viral diseases with precise medicines to give to the right patient at the right time."

Nat Moorman | PhD Co-Founder and Scientific Adviser | **READDI**

Drive progress in the public sector

From public health to public finance and national security to infrastructure, SAS empowers the public sector to make AI-informed decisions, helping to protect and improve the lives of citizens around the world.

SAS puts governments' data to work to improve their effectiveness and create better outcomes for individuals, families and communities. With data and AI, governments are better prepared for uncertainty and able to respond quickly to complex, evolving public sector challenges. Not only can governments make decisions faster with SAS, but they can also easily explain their decision making and processes while ensuring data privacy and security for citizens.

SAS is no stranger to the public sector. Our very first customer was a government agency, and today, more than 1,500 public sector departments, ministries, offices and agencies use SAS worldwide. Within public health and government health care, SAS is used to better uncover needs, assess population health programs, and identify and address inequities. In social services, SAS helps governments secure better outcomes for citizens by providing the right benefits to the right people at the right time. The use of real-time data is helping governments understand current conditions, respond in a timely manner and optimize performance.

Around the world, government and health care organizations are using SAS to become more resilient, capable and agile, ready to tackle whatever challenges are around the corner.

Managing Dutch roads and waterways with intelligence

Nearly one-fifth of the Netherlands is covered in water. And that percentage would be even greater if not for Rijkswaterstaat, the Dutch government agency responsible for designing, constructing and managing the country's extensive waterways and infrastructure system. The agency is the mastermind behind some of the most prestigious water projects in the world.

Rijkswaterstaat is always looking for innovative solutions that increase performance while reducing costs. That's why the Information Provision Platforms Department at Rijkswaterstaat decided to migrate from SAS®9 to become an early adopter of SAS Viya 4.

"I have heard positive reactions from users who find SAS Viya more user-friendly, and the analytical performance has also improved," says Hans Soeteman, Head of Information Provision Platforms for Rijkswaterstaat. "Additionally, with SAS Viya we can develop new dashboards faster and easier. It's also easier to integrate streaming data, data management has improved, and users have more control over data quality. Last but not least, life cycle management has been enhanced because everyone is now working on the latest version of the software at all times."

Since the migration, Soeteman says the demand for dashboards has increased in every part of the organization. Ultimately, Viya has helped Rijkswaterstaat improve speed, productivity and collaboration.

"We control virtually every process in our organization with data, so it is essential that we work with an analytics platform that is user-friendly and accessible to everyone. By transitioning to SAS Viya, we are ready for the future."

Hans Soeteman | Head of Information Provision Platforms | **Rijkswaterstaat**
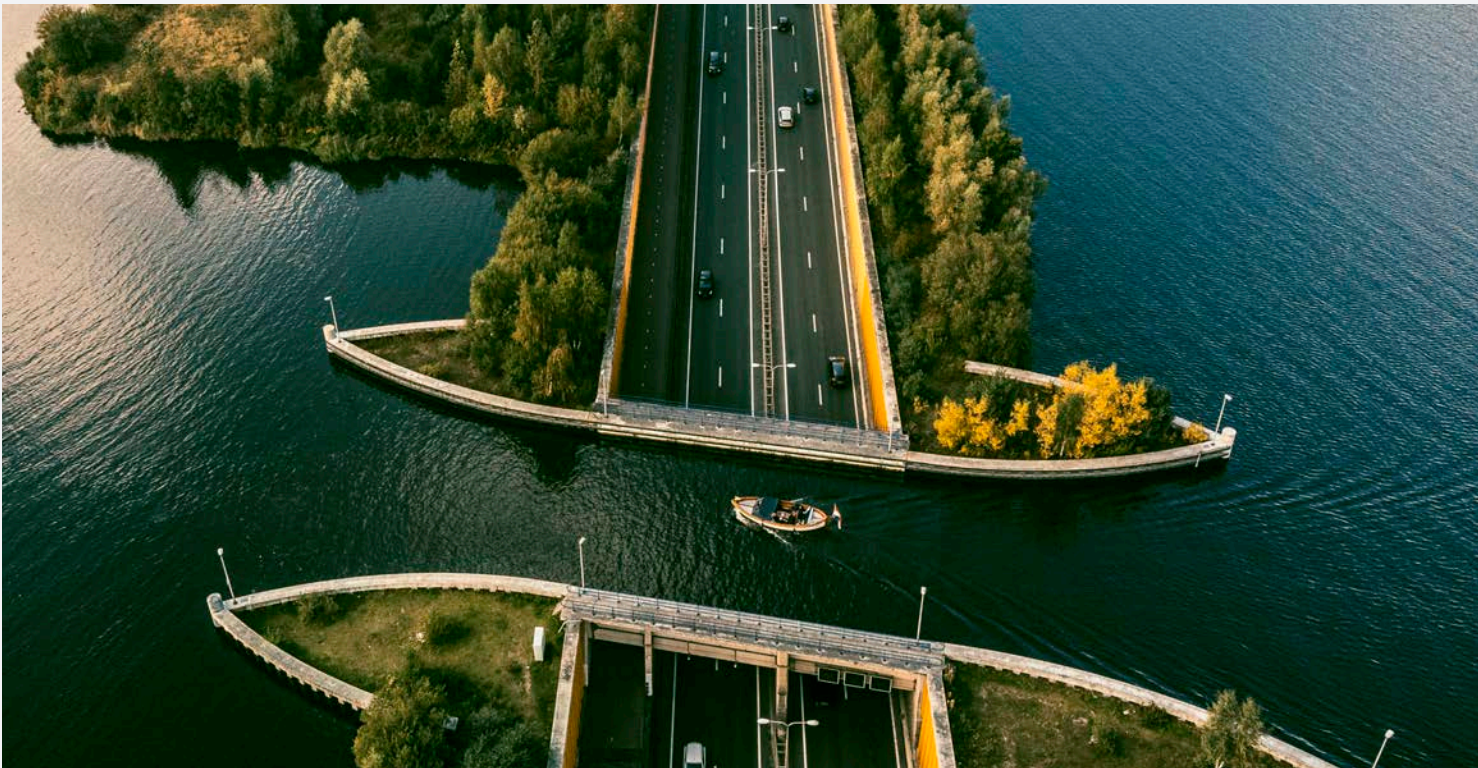
Discover the full SAS solutions portfolio

In addition to our 2024 focus areas, SAS proudly delivers other industry-specific solutions to meet business needs and promote industry resiliency – no matter the size of the organization. Our solutions work behind the scenes across most of our daily lives.

Consumer and industrial industries

Manufacturing

With SAS, manufacturers can adapt to emerging AI technologies, surpass production goals, improve quality and customer satisfaction, and reduce energy costs.

Retail & Consumer Goods

Whether you prefer shopping online, in-store, or buying online and picking up in-store, SAS helps retailers sense real-time sources of demand to better predict not only what merchandise assortments are needed, but where. This streamlines the path to purchase while also meeting localized demand.

Telecommunications, Media & Technology

SAS helps telecom and media organizations maximize profitability, deliver exceptional customer experiences, automate processes, protect their bottom line, and grow their business with fast, trustworthy data and AI.

Service and infrastructure industries

Capital Markets

SAS delivers high-yield insights from data by helping identify fraud, meet regulations and achieve a more complete view of aggregated risks.

Hospitality

Ensuring a memorable and positive customer experience is critical in the hospitality industry. With real-time analytics, behavior-based segmentation, and embedded AI, SAS hospitality solutions help industry leaders meet – and exceed – customer expectations.

Oil & Gas

SAS delivers oil and gas analytics software that helps manage risk and uncover new opportunities – now and in the future.

Sports Analytics

As you are cheering on your favorite sports teams, SAS sports analytics may be hard at work behind the scenes to transform data into insights for better decisions on fan engagement, player performance, venue optimization and profitability.
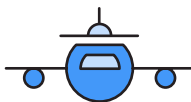
Travel & Transportation

Our travel and transportation software solutions help drive better insight into customers, pricing and processes to improve decision making and business outcomes.
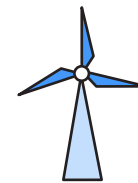
Utilities

SAS delivers solutions and technologies that provide the analytics foundation utility leaders need for their organization's digital transformation.

Multiplying impact with partners

At SAS, we know that when we combine our AI and analytics leadership with the innovative technology and expertise of our partners, we help our customers make better decisions in the moments that matter most. SAS partners bring our data and AI platform to life, creating innovative new applications to solve business problems, guiding our customers through deployment and helping them get the most out of SAS for all their analytics needs.

SAS' vibrant partner ecosystem is composed of powerful value creators that help solve customers' most challenging analytic problems through solution delivery, development and co-creation. Partners extend SAS' ability to bring customers insights and a competitive edge. SAS commits software and expert resources, collaborates with partners on their technology, and builds new partner-driven, market-ready solutions that empower our partners and customers to grow their businesses.

Partner Fast Facts

1,700+
partners

96
countries

74%
total new software and hosting sales influenced by partners in 2023

Our partner community

Collaborating with technology partners

We engage with technology partners to help our customers derive even greater value from their data with optimized experiences. These partners accelerate customer outcomes, hyperscale compute potential and help control creeping storage and infrastructure costs.

Delivering with global system integrators

Our global system integrators (GSIs) use their deep SAS skills, industry experience and customer relationships to ensure that customers maximize the value of their analytics investments. With implementation teams across enterprises and architectures, GSIs help shorten the distance from data to insight, accelerating successful results.

Scaling with channel partners

We serve more clients and markets by working with distributors, solution providers and service providers to solve customers' most complex problems and address their most profitable opportunities through delivering and managing our cutting-edge AI and analytics solutions. SAS partners bring industry knowledge and SAS expertise to market, turning data into answers at scale.

These are a sampling of our many valued SAS partners.
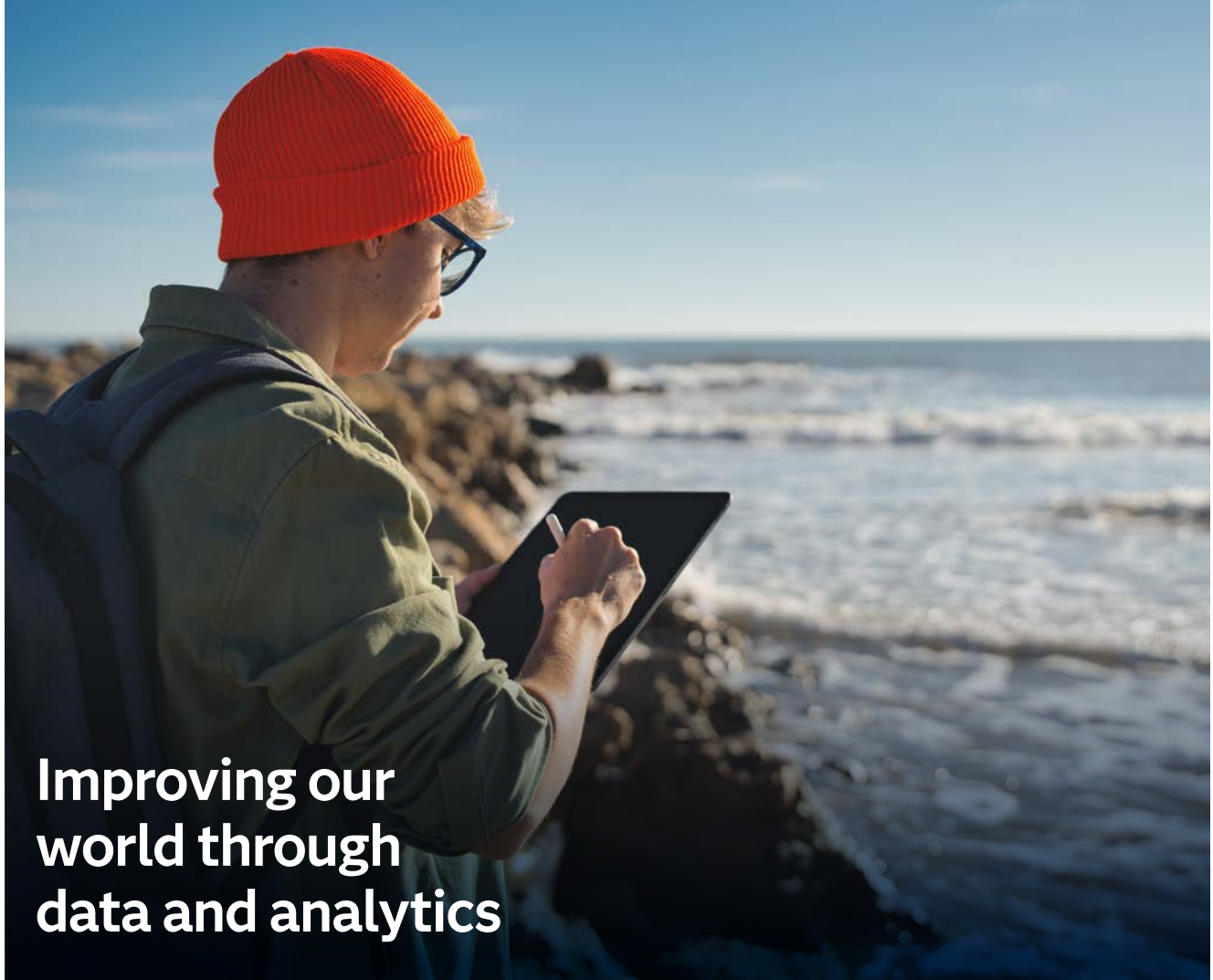
Improving our world through data and analytics

Whether protecting our environment, improving patient treatments and outcomes or educating the next generation of data scientists – we believe in the power of data and analytics to improve the human condition. Knowing that the power of trustworthy technology can help drive better decisions and create a more sustainable future, we strive to help our communities and customers with their environmental, social and governance initiatives. As business leaders focused on our corporate social responsibility, we see it as our duty to lead by example.

One of the ways that SAS does this is through the Data for Good movement, which encourages using data in meaningful ways to address humanitarian issues around poverty, health, human rights, education and the environment. As a vital part of the Data Ethics Practice, the SAS Data for Good team generates thought leadership and showcases the power of SAS technology through projects like protecting endangered sea turtles, helping move people out of poverty or preparing for the next pandemic. These efforts put SAS' principles into practice, addressing pressing global issues through the lens of responsible innovation.

Each year, SAS employees volunteer their time in various Data for Good projects to tackle these societal challenges and help support a better, safer and more equitable world. Our social impact programs rely on their curiosity, expertise and passion for using their skills for social good. Thanks to these efforts, as well as the company's partnerships with customers, industry groups, nonprofits, governments and global organizations, SAS continues to apply technology to the world's most pressing needs.

Internally, we focus on our own efforts to improve the world we share. SAS has prioritized being a good corporate citizen, consistently expanding our sustainability and conservation efforts at SAS locations around the globe. SAS also strives to help our community through charitable donations, volunteering in our communities and applying our innovation for good in the world. Our corporate philanthropy supports strategic education initiatives that increase interest in and exposure to data, AI, analytics and computer science to help create a diverse STEM workforce.

SAS seeks crowd-driven AI to protect endangered sea turtles in Galapagos

As part of a partnership to bring faster, more productive data and AI to the world of conservation, SAS and the University of North Carolina Center for Galapagos Studies have launched a project asking online volunteers to play a "match game" with images of Galapagos sea turtles' faces. The goal is to use these thousands of images to crowd-train a SAS computer vision model to accurately recognize individual turtles on its own. Then, that model can be turned loose on even more turtle photographs to get more useful information into the hands of researchers faster than ever before.

Galapagos researchers use images of all local sea turtles to monitor their health over time, but identifying individual turtles by their facial markings is time-consuming. The goal is for this novel approach to take that burden off researchers by using AI and computer vision to do the matching – leaving the experts to focus on proactively protecting these icons of the Galapagos.

The global challenge to protect endangered species like the Galapagos sea turtle is daunting, but SAS Viya infuses conservationists' efforts with speed and productivity. Our open analytics platform with cloud-enabled, in-memory processing provides accurate results at incredibly fast speeds. That means research data that previously took years to analyze can now be put to good use in a fraction of the time.

"The beautiful thing about citizen science is that every single person with a phone can help. Because information is powerful, and the power of people to get that information is important. Technology now allows us to make that happen, and having a way of making it more automated is the next level."

Juan Pablo Muñoz-Pérez, PhD | Researcher | **Galapagos Science Center**

Empowering a new generation of technologists

The rise of new, advanced technologies demands the generation of new, advanced skills. SAS strives to meet that demand by helping people skill up to take advantage of the data and AI-driven economy.

Teaching and learning

From educators to students, academic researchers and independent learners, SAS offers anyone in a teaching and learning environment free and low-cost options for accessing our world-class analytics software, training resources and online communities. The Education Analytical Suite provides comprehensive SAS foundational technologies for teaching, learning and academic research via reduced-cost enterprise licenses. SAS OnDemand for Academics provides free access to powerful SAS software for statistical analyses, data mining and forecasting. And SAS Viya for Learners offers free access to data science and machine learning tools for educators and their students.

More than 290,000 educators and learners took advantage of these free software offerings in 2023. Additionally, more than 20,000 students globally joined SAS Skill Builder for Students, a free online portal that provides access to everything students need to launch their analytics careers. Over 2,000 educators globally joined the SAS Educator Portal in 2023 and took advantage of free instructional materials and e-learning designed to make integrating analytics into the classroom easy and effective.

Last year was also the second year of the Curiosity Cup, a global data science competition where 50 student teams across 16 countries researched topics ranging from mental health and energy to entertainment and fraud.

Increasing representation in analytics

SAS is committed to increasing diversity, equity and inclusion not only within the company, but also in the field of AI and analytics.

In 2023, SAS announced its inaugural class of HBCU+ Fellows, a program that supports educators at Historically Black Colleges and Universities (HBCUs) by helping integrate analytical tools into academic programs and increase access to data and analytics education. In addition,

SAS hosted the second HBCU Invitational as part of the SAS Championship golf tournament, which started with a career day event for the student golfers to learn and network with SAS employees and executives. In addition, SAS participates in several outreach and recruitment initiatives with HBCUs, including SAS HBCU STEM & Business Connects and the HBCU Academic Excellence Program. SAS also participates in the HBCU Partnership Challenge created by the Congressional Bipartisan HBCU Caucus, as well as the CEO Roundtable on Cancer's "Going for Gold" Initiative to elevate the health of those disproportionately affected by cancer.

In 2023, SAS also expanded its work with Code the Dream, an organization that aims to make tech careers accessible to people from diverse low-income backgrounds by bringing on an inaugural cohort of Code the Dream Fellows. The one-year program brought 10 Code the Dream students to SAS for intensive training and professional development work before each of them transitioned into full-time positions in SAS R&D. In 2024, a new cohort of students will join the initiative to enhance their skills, contribute to priority projects and gain real-world experience.

SAS is also committed to helping veterans, service members and military spouses successfully transition into new careers by offering free and discounted data science and analytics training and certifications.

Credentialing

In 2023, SAS established more than 50 new partnerships with college and university programs around the world. These partnerships ensure that students are gaining in-demand skills and that employers can easily connect with them through digital credentials. More than 6,000 SAS certifications were earned in 2023. The newly launched SAS Certification and Skills Directory allows employers to find those who hold these sought-after industry credentials.

Communities

Our vibrant online community allows users to exchange extensive SAS expertise or look for help through presentations, hands-on workshops and access to SAS experts. Here, practitioners receive technical advice on how to use SAS software, as well as best practice approaches to solving analytical problems. In addition to peer-to-peer support, the online community provides a space for collaboration on global programs such as the SAS Hackathon, Ask the Expert webinars and regional SAS user groups.

Data literacy

We believe that helping understand the value of data starts by teaching the basics, including helping students rethink their approach to problem-solving. In doing so, students begin to see firsthand how integrating data into the problem-solving process can help drive meaningful results.

In 2023, SAS launched its second free data literacy e-learning course, Data Literacy in Practice, which empowers individuals and professionals to explore and visualize data with confidence. Starting from the basics, Data Literacy Essentials introduces learners to fundamental data literacy concepts, such as what data is and why it matters. It has been activated over 22,000 times in nearly 80 countries by more than 600 colleges and universities and 3,500 nonacademic organizations. Together, Data Literacy Essentials and Data Literacy in Practice create a pathway for learners to take introductory visual analytics courses, creating a pathway for new SAS users. SAS partners with local and national organizations like Code.org, AI4All, CS4All and Data Science for Everyone to inspire in students a fascination with data.

Fostering a world-class culture

Our culture has always been an integral part of who we are as a company, connecting the curious nature that gave us our start to the spirit of innovation that moves us forward. SAS is recognized internationally as a pioneer in creating a great workplace and remains true to that spirit. The world around us has changed since our inception, but our culture has and will continue to ground us with stability and purpose.

Since we began, our commitments to our employees, communities and environment have allowed us to help our customers advance innovation and outpace the challenges of tomorrow. This holistic approach to corporate culture keeps SAS ranked among the best workplaces worldwide and at the top of myriad lists that acknowledge a commitment to work/life integration and diversity, equity and inclusion.

The way we act and interact is based on trust, respect and a bold motivation to drive change. We believe great ideas can come from anywhere and foster meaningful work, well-being and empowerment to make a difference that changes people's lives. This culture of trust, flexibility and values nurtures a passionate, dedicated workforce that inspires innovative solutions to solve our world's most pressing problems.

Committed to diversity, equity and inclusion

At SAS, diversity, equity and inclusion (DEI) is multidimensional – we have a culture that blends our different backgrounds, experiences and perspectives from employees in over 50 countries around the world. We want everyone to feel confident in embracing their individuality and curiosity and know that they will be respected for their unique contributions and abilities. Our diversity of thought, background and abilities allows us to deliver great software that can solve our customers' biggest challenges.

We execute this strategy through various initiatives and policies across recruitment and hiring, culture and work environment, education and community outreach, and training opportunities. To learn more about SAS' DEI efforts supporting our strategy, check out our DEI report at sas.com/diversity.

Representation

Reviewing diverse workforce representation at all levels across the organization by improving our recruitment, hiring and promotion practices.

Inclusion

Fostering an inclusive culture and work environment where every employee can thrive as their authentic self and achieve their full innovative potential.

Community

Developing the diverse workforce of tomorrow that represents our world through education policy, outreach and community initiatives that promote inclusion and equity.

DEI Action Board

Since 2020, SAS' internal DEI Action Board of diverse leaders across the company has served as a sounding board on DEI activities and integrates DEI into the company's mission, operations, strategies and business objectives.

Board members include sponsors of our Employee Inclusion Groups and represent many dimensions of diversity, including but not limited to race, ethnicity, gender identity, abilities, age and sexual orientation. The board helps provide best practices regarding DEI related to how we engage our employees, partners, customers, and communities and provides input on programs, policies, and practices.

Employee Inclusion Groups

SAS Employee Inclusion Groups (EIG) are company-sponsored, voluntary, employee-led and employee-driven groups. EIGs serve as a resource for employees and the organization by fostering a diverse, equitable and inclusive workplace aligned with and supporting the organizational strategy, mission, values, goals, practices and objectives.

SAS All Abilities Network (ABLE)

SAS LGBTQ+ & Allies (PRIDE)

SAS Black Initiatives Group (BIG)

SAS International Connection (SASIC)

SAS Women's Initiatives Network (WIN)

SAS Military Network (VETS)

SAS Young Professionals Network (YPN)

We are committed to:

Innovation

As a global leader in data and AI, SAS is committed to driving innovation that pushes boundaries, challenges the status quo and provides knowledge in the moments that matter most. By continuing to ask bold questions, remaining resilient and prioritizing data-driven decisions, we are creating innovative opportunities that make a positive impact on our world.

Diversity, equity and inclusion

SAS has a multidimensional culture that blends our different backgrounds, experiences and perspectives from employees around the world. We want everyone to feel confident in expressing their ideas and know that they will be respected for their unique contributions and abilities. For us, it's not about fitting into our culture – it's about adding to it.

Education

Our commitment to education is a natural extension of our academic roots. SAS supports global education initiatives that promote learning for all and build a global community of innovators.

Data for Good

From helping resolve critical humanitarian issues and using AI to drive better, more equitable results in health care, to changing conversations around behavioral health and protecting at-risk children, we believe data and analytics make lives better.

linkedin.com/company/sas

X.com/SASsoftware

youtube.com/SASsoftware

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instagram.com/SASsoftware

sas.com/rss

Website
sas.com

News Room
sas.com/en_us/news.html

Insights Center
sas.com/insightscenter

SAS Blogs
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