WHEN THERE’S STRENGTH IN NUMBERS, WE CAN DO GREAT THINGS.

At this moment, the world is focused on solving one problem. That’s why we’re partnering with organizations worldwide to put analytics to work where it’s needed most.

• We are helping hospitals use predictive analytics to allocate critical, high-demand resources.
• We are collaborating with public health officials to build epidemiology models based on local data to forecast impacts on populations and infrastructure.
• We are working with governments to optimize resources so citizens get the best health outcomes possible.
• We are helping agencies with contact tracing using social network analytics to determine and visually track potential exposure.
• We are engaging with health systems to build capacity before it’s needed using scenario analysis.
• We are enabling producers of vital goods like food and medical supplies to forecast changes so they can adapt production and supply chain.

The variables are many. But the world is proving there is clarity and strength in numbers. Because good data and good decisions will save lives and help us get better together.

To learn more, visit sas.com/coronavirus
Just as we began to implement our 2020 plans, the COVID-19 pandemic seemingly paralyzed the world. Many of us have never lived through anything like the coronavirus, nor such an incredible amount of disruption in our daily lives. From something as simple as taking a walk in the park or hosting a birthday party to broader decisions like canceling large gatherings, the way we make personal decisions vastly shifted. We began reconsidering every decision and re-evaluating every necessity. Actions that were once subconscious instinctive behavior have now become calculated, cautious equations.

The same applies to business. Many of the insights that once drove critical business decisions no longer apply as organizations adapt to an ever-changing new normal – including disruptions in critical supply chains, medical supply shortages and workforce constraints. Today, more than ever, we are witnessing the importance of living in a data-rich world. As we consult with government agencies, health care workers and supply chain experts on their responses to the coronavirus, we see an intense need across industries for more data and, more importantly, an increased demand to analyze the data that is available.

As many companies have in the digital era, we’ve taken steps to transform to better enable our customers’ success. Even in the most difficult economic times, like the one we are currently experiencing, we’ve maintained that spirit of innovation, constantly reimagining how analytics should evolve and can improve the world. We’ve adapted to the demand for analytics in the cloud. With SAS® Viya® 4, SAS will not just be cloud ready, it will be cloud native. We are continuously working to improve the customer experience – all while keeping our award-winning culture intact.

Digital transformation is top of mind for our customers today. Organizations need to make smarter and faster decisions in response to disruptive events like COVID-19. We’re helping our customers operationalize their analytics and modernize in the cloud to achieve the full potential of their analytics and AI investments, and ultimately, be successful in their digital transformation.

Last year, we announced a $1 billion investment into advancing AI technology, education and services. A significant part of our annual revenue is reinvested into R&D to optimize the analytics life cycle for our customers. Because we are constantly enhancing SAS Viya to be more flexible, fast and open, organizations are increasing their commitment to SAS – and trusting our technology as they make decisions that affect their organizations and the world.

By working together, tapping into the strength in numbers, we can help our customers through these uncharted waters – and any others that may arise. We continue to help customers do great things with data, with analytics and with SAS. And, all along the way, we maintain the belief that caring for our people, our communities and our planet is simply the right thing to do to create a better, safer world.

Sincerely,
Jim Goodnight CEO of SAS
Improve decisions through transformation

We make analytics software that fuels exploration and discovery. After all, curiosity is at the heart of human progress. And decisions are what drive organizations to impact.

Everything we do at SAS is designed to empower better decisions. By making better decisions, organizations can differentiate themselves from competitors, improve lives and even change the world.

When we reflect on why we do what we do, the answer is clear. With analytics, we give people the power to make better decisions. The impact is extraordinary. Better decisions in business translate to more jobs, higher profits and a stronger economy. For teachers, better decisions can spark a lifelong passion in students. Countries can better respond to disasters. And doctors can confidently know when to attempt lifesaving cancer surgery.

At SAS, we provide technology and services to help organizations use data to make decisions - decisions about what is at stake, who is doing wrong, what connections need and want, and what should be done next. Throughout this report, you’ll read stories of organizations using SAS to make better decisions. By lighting the path from analytics to insight to action, we empower organizations to transform the impossible into the possible - our greatest privilege. Next, we’ll share how SAS technology is transforming industries and helping people solve the most pressing issues of our time.

“All at-risk patient may never know that SAS technology and services were at work to aid in their survival. And that is OK. The hospital administration, the IT department and the data science team need to know about SAS; they need to know about the art of the possible; they need to know how to bring data-driven decisioning to life.

We help them to create the connective tissue between data and impact. That is what we do.

We improve lives through better decisions.”

Oliver Schabenberger
Chief Operating Officer and Chief Technology Officer SAS
Transformation through innovation

At SAS, we constantly innovate our technology and business structure to help organizations in all industries do the same. Take a traditional industry like agriculture. Over the years, farmers have increasingly relied on technology to feed more people. Today, there is immense potential in the use of AI and analytics to further improve plant health, soil productivity and crop yields, among other uses. SAS started as an agriculture project back in 1976, and with the 2019 announcement of our new AgTech business unit, we remain committed to helping farmers secure a safe and sustainable food supply for a growing world population.

Retail is yet another industry transforming at the hands of innovative technology. With retail omnichannel analytics with embedded AI, retailers can make better decisions in every area of the business from merchandising to marketing. When customer experience matters, SAS offers a full suite of customer intelligence software to help retailers aggregate online and offline data, deliver more personalized shopping experiences and increase revenue. This includes SAS Customer Intelligence 360, which provides a 360-degree complete customer view, to provide contextual customer engagement across inbound and outbound channels and compelling customer experiences tailored to each unique customer’s journey.

Cloud computing plays a central role in our technology road map. Not only does it help companies deal with the sheer volume of data, it’s what customers need to become more agile, scale to new challenges and operate more efficiently. The upcoming SAS Viya 4 platform is a significant step forward in our journey to provide cloud-native technology built for the next generation of enterprises. With SAS Viya 4, organizations will get a reduced footprint and a markedly faster installation time. Everything we do at SAS is designed to help organizations transform to make better decisions. Innovation is our north star, and we constantly strive to deliver better for you.

AI and analytics help secure a safe and sustainable food supply

To feed a world population approaching 10 billion by 2050, global food production must become more efficient. Artificial intelligence and advanced analytics could hold the key to agriculture’s future. SAS is forging an agricultural technology business unit to help growers and agribusiness leaders turn an exploding amount of agricultural data into insights that inform safe and secure food production. SAS is also enhancing agricultural research and talent development through its support of the North Carolina Plant Sciences Initiative at North Carolina State University. The initiative drives cross-disciplinary research that increases and diversifies crop yields, extends growing seasons and improves sustainability. Additionally, the SAS Global Academic Program is developing resources to help create the next crop of agricultural analytics experts.

“This partnership with SAS will be pivotal in helping us harness the power of data to improve agricultural outcomes and provide global consumers a higher-quality, more accessible food supply.”

Richard Linton
Dean, College of Agriculture and Life Sciences
NC State University
Our technology has propelled four decades of growth for SAS in a competitive market. Today, more data and more diverse data are generated than ever before and are moving about the networks. SAS puts the right analytic technology to the right place at the right time: on premises, in a public or private cloud, at the edge. Here are three technologies that we’re refining as we move into the next decade.

SAS Platform. The SAS Platform is the engine that powers our analytics technology. Open to any interface or coding language, our end-to-end platform works with all analytical tools including open source. From data to discovery to deployment, the SAS Platform handles the entire analytics life cycle, helping you operationalize analytics and get models into production faster.

Empower everyone, everywhere with analytics

Artificial Intelligence. The stickiness of AI speaks to its usefulness. For years, we’ve embedded AI technologies into solutions across the SAS portfolio. During that time, we’ve advanced AI technologies like machine learning, computer vision, natural language processing and forecasting and optimization. As a result, our AI continues to grow, and a rapidly increasing number of customers now rely on SAS to operationalize AI for profit and human progress.

AIoT. When you merge AI and IoT, you get the Artificial Intelligence of Things, or AIoT – a revolutionary combination that can transform industries, elevate customer experiences and accelerate business performance exponentially. We’ve engineered our AI solutions to feed on real-time data streaming from billions of IoT devices. Soon, most IoT projects will be AIoT projects, and SAS is positioned to deliver substantial business value in this area.

Customer engagement blooms with help of AI

1-800-FLOWERS.COM, is a billion-dollar enterprise with more than a dozen gifting brands in its portfolio, including Harry & David, Cheryl’s Cookies and Simply Chocolate. As customer buying habits have changed, so has the company. The original storefront eventually evolved into its namesake floral brand, where shoppers could order flowers by phone. Next came the web, then mobile, and today the company is pioneering innovative approaches in chatbots and conversational commerce - underpinned by SAS Analytics and artificial intelligence (AI) solutions powered by the SAS Platform.

And with SAS Customer Intelligence 360, they can better determine the kind of offers customers are interested in receiving and what offers they’ll respond to. By analyzing the profile of the customer who starts in one brand and then migrates to another, marketers can better target customers with a propensity to shop with multiple brands.

1-800-FLOWERS.COM
AI is in our DNA. Long before it dominated headlines, AI was an integral part of SAS software. Today we build upon decades of research to embed AI technologies like machine learning, computer vision, natural language, deep learning, and forecasting and optimization in solutions across the SAS portfolio. As a result, customers in every industry can capitalize on advancements in AI.

Moving beyond the domain of the tech glitterati, AI is transforming society before our very eyes. Modern applications of AI have given the world self-driving cars and virtual assistants, and have helped us detect fraud and manage resources like electricity more efficiently.

SAS delivers AI in many ways. From machine learning to computer vision to natural language processing to forecasting and optimization, we develop the solutions to push business forward. At SAS, AI is not a standalone product but a surge of intelligence to our existing products. Much like Siri was added as a feature to a new generation of Apple devices, we inject AI capabilities into our software to help organizations boost productivity and unlock new possibilities. Automation, conversational platforms, bots and smart machines can be combined with large amounts of data to improve many technologies at home and in the workplace, from security intelligence to investment analysis. Practically every industry has something to gain from artificial intelligence. Retailers now use virtual shopping capabilities to offer personalized recommendations and discuss purchase options with consumers. In banking, AI enhances the speed, precision and effectiveness of human efforts, and is used to identify which transactions are likely to be fraudulent. And in the public sector, governments are using AI in critical services like protecting at-risk children, supporting national defense and making cities smarter – for the benefit of citizens.

The promise of genuine AI and its potential for humankind has arrived. For this reason, we’re investing $1 billion in AI over three years through software innovation, education, expert services and more. This commitment builds on our already strong AI foundation. And we continue to underpin these offerings with data management, visualization, deployment and decision support to help customers operationalize AI and optimize customer return on their AI projects.

Expert knowledge of tools, techniques and methodologies is vital to unlocking the benefits of AI. This knowledge is scarce and difficult to acquire because the need for AI talent has outpaced industry’s ability to fill it. To address this problem, SAS has created the SAS Artificial Intelligence Center of Excellence (SAS AI CoE), a group of PhD-level experts in AI, machine learning, natural language processing, computer vision, optimization and simulation, who are focused exclusively on customer implementations. The group is highly tuned to customer needs, and combines a business-focused mindset with deep technical expertise to address business challenges and conduct assessments to uncover innovative opportunities that have business value.

“AI has been an integral part of SAS software for years. Today we help customers in every industry capitalize on advancements in AI, and we’ll continue embedding AI technologies like machine learning and deep learning in solutions across the SAS portfolio.”

Jim Goodnight CEO SAS
AI and analytics turn service repair data into cost savings

American Honda Motor Co. uses SAS to improve warranty claims and forecast usage for parts and services in order to reduce costs and better serve its customers.

By applying SAS Analytics to warranty data, American Honda’s advanced analytics team gave the claims group and field personnel the ability to quickly and accurately identify claims that were incomplete, inaccurate or noncompliant. Now, it takes less than a minute to identify a suspicious claim, and automated reporting saves staff over a week of time. Additionally, examiners are finding a noncompliant claim 76% of the time versus 35% of the time without SAS.

The effort to increase warranty compliance has also cut costs for American Honda - it saw a reduction in labor costs for 52% of its available labor codes. The company also used SAS to develop demand forecasts that were 99% accurate, as well as to quickly evaluate customer survey data. This allows the company to be better equipped to deliver a positive customer experience.

“Looking backward on a year-by-year basis, we’ve been within 1% of where we forecast to be.”

Kendrick Kau, Assistant Manager, Advanced Analytics Group, Honda

99% forecast accuracy

52% reduction in labor costs

Personalizing online shopping with AI to enhance the overall customer experience

Shop Direct, the UK’s second-biggest online pure-play retailer, has 4 million customers that shop on its online stores. The company is at the forefront of digital and mobile retailing – 100% of its transactions take place online, with over 63% of those completed on mobile devices.

SAS has helped Shop Direct successfully build a system capable of analyzing two years of historic customer, sales and inventory data in real time. Now, the Shop Direct website can provide personalized product displays based on individual consumer behavior. This helps the retailer convert browsers to buyers more often by balancing customer needs with customer value and risk. It also gives customers an improved, more personalized shopping experience.

“We’re all about making it easier for our customers to shop. That’s why we’re passionate about personalization. We want to tailor everything for our customer, the shop she visits and how we engage with her before, during and after she’s shopped. Our partnership with SAS will allow us to get even better at using data analytics to show our customers the right products at the right time to capture her attention.”

Alex Baldock, Group CEO, Shop Direct

99% forecast accuracy

52% reduction in labor costs
Cloud

Analytics create value. But to cash in, organizations must ensure resources like data, insights and analytics software are available across the enterprise. Companies want to realize efficiencies from cloud computing, lowering the costs of storage and processing. Together, these factors are making it less likely that organizations will power their analytics efforts using a fixed, on-premises infrastructure. While every organization has different needs, most still require a strategy for the cloud, and the ability to find the right combination of technologies to turn a mountain of data into useful decisions.

Through a comprehensive vision for cloud solutions and deployment, SAS is aggressively evolving our technology to become cloud-native. We help organizations innovate, manage risk and create value through the SAS Cloud, which combines software, infrastructure and services that are designed and managed by SAS for optimal performance and value. And we offer cloud-deployable options that help customers run SAS in new and modern ways on almost any private, public or hybrid cloud infrastructure.

SAS services are configured to address the growing interest in a "cloud first" approach to analytics, AI, data visualization and data management. Innovative deployment options now serve any business need. For example, SAS for Containers gives data science teams a flexible and efficient way to execute SAS workloads and help IT teams to be agile and take advantage of cost-efficient cloud infrastructures. And with SAS Results, a cloud-based results-as-a-service offering, customers provide the data, a specific business problem and a scope of work, and SAS delivers answers you can act on.

Cloud collaborations

In 2019, SAS and Red Hat announced an expansion to their existing partnership with the creation of a best-in-class hybrid cloud analytics solution, using SAS Viya on Red Hat OpenShift, the industry’s most comprehensive enterprise Kubernetes platform.

By offering our award-winning software and services on the SAS Cloud or third-party cloud providers like Amazon Web Services (AWS), Google or Microsoft Azure, we give organizations the ultimate flexibility to optimize the performance and value of their analytics ecosystem.

SAS doing great things with public cloud providers

Handling today’s modern analytic workloads in the cloud is no easy task. Heavy workloads of AI, model development and model training can really slow things down. And more and more SAS customers are exploring options for running their development and production workloads. As customers make the decision to move toward cloud-native deployments, SAS continues to develop software, services and deployment patterns that use the capabilities associated with public cloud providers like Microsoft Azure, Amazon Web Services and Google.

From establishment of Global Cloud Acceleration Centers to using advanced technologies to modernize SAS’ risk, fraud, compliance and customer intelligence solutions, SAS and our partners help companies navigate their cloud journey more simply and with optimal efficiency.

This includes:

- Coordinated security and access management services of environments that are as safe as on-premises deployments.
- Access to cloud-based data sources like AWS Redshift, Google BigQuery, Snowflake and more.
- Orchestration tools like OpenShift and other Kubernetes services to manage SAS in container-based environments.
- Continuous innovation/continuous delivery pipelines to deploy new SAS functionality without major upgrade efforts.
Taking customer satisfaction to greater heights with sophisticated text analytics

In an industry with a massive influx of requests for support, the insurance giant Nationwide set out to conduct a proof of concept (PoC) using SAS Text Miner and SAS Contextual Analytics to understand the types of inquiries they receive on several channels—and ultimately find ways to better manage them.

In the PoC, the analysts identified the root cause of each inquiry, whether the query was resolved, and how many emails were exchanged in the process. Sentiment analysis from the SAS solutions helped Nationwide to detect the member’s mood; for instance, unsurprisingly, analysts identified that people’s moods worsen as the number of emails rises. SAS’ results allowed Nationwide to cut the number of customer service emails in half. Through a more efficient, online digital process, they can now resolve several queries, reinvest the savings generated, and provide more powerful insights to their customer base with a sense of urgency and innovation.

“SAS continues to form a key pillar of our analytics landscape. Within a short PoC using SAS Test Analytics to analyze member inquiries, we established several concrete ways to make our service legendary. We are now deploying SAS Viya to take our analytics capabilities to the next level to enable our employees to focus on resolving issues rather than classifying them.”

Graeme Reed Senior Manager of Analytics Nationwide

50% reduction in customer service emails

Pharmacy benefit manager slashes fraud, waste and abuse using artificial intelligence

Prime Therapeutics (Prime) serves 30 million members across the US through its relationships with health plans, employers and government programs. The organization saw an opportunity to save clients’ money—and lives—by looking more holistically at fraud, waste and abuse, which costs health care organizations billions of dollars each year.

Prime invested in SAS Detection and Investigation for Health Care on the SAS Cloud. This advanced analytics platform allows Prime to consolidate data from pharmacies, medical drug claims and medical services. By applying the platform’s artificial intelligence and machine learning capabilities to this comprehensive data set, Prime can now detect and prevent fraud regardless of the source.

Because Prime opted to deploy the solution on the SAS Cloud, it also gained numerous benefits, like expedited access to the software, the ability to easily share results with others and savings on infrastructure expense.

By staying ahead of new fraud schemes, Prime also has the power to save lives. For example, using SAS, Prime pioneered a new predictive modeling process that uses more than 170 potential predictors to identify patients most at risk to receive high-dose opioids—a factor linked to increased chances of opioid abuse.

Prime has increased the speed and accuracy of investigations and has now exceeded $355 million in recovered payments and cost avoidance over the 18 months the solution has been in place.

“We’ve worked so hard over the years to fight fraud, and this new capability with SAS has helped us take it to the next level to safeguard our members and save our clients millions of dollars.”

Jo-Ellen Abou Nader Vice President of Fraud, Waste and Abuse and Supply Chain Optimization Prime Therapeutics

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Artificial Intelligence of Things (AIoT)

We’ve found clear evidence of momentum behind this emerging combination of technologies. And it makes sense. The true value of IoT data is only realized when combined with AI and analytics. Otherwise, your IoT data just collects dust. Companies that develop AIoT capabilities report stronger results across critical organizational goals including the ability to speed up operations, introduce new digital services, improve employee productivity and decrease costs.

This was confirmed last year in IDC’s global AIoT study, in which 450 business leaders were asked about their use of IoT and AI technologies. The survey revealed the most significant predictor in realizing value from IoT initiatives across an organization is the heavy use of AI. A full 90% of survey respondents heavily using AI in their IoT operations reported exceeding value expectations. The research also showed organizations using IoT with AI appear to be more competitive than IoT-only enterprises by a double-digit margin across a variety of business indicators like employee productivity, innovation and operating costs.

For Volvo Trucks and Mack Trucks, sensor data and AI solutions from SAS are used to predict maintenance issues and minimize unplanned downtime. Similarly, Lockheed Martin saved 1,400 hours of downtime for its biggest defense customer by applying machine learning to real-time data streaming from C-130 aircraft. And a high-tech manufacturer in Japan uses SAS to analyze streaming data from IoT devices to better forecast demand and improve customer satisfaction.

Though still a nascent technology, AIoT is making a faster and greater impact than expected. And we anticipate explosive growth over the next few years as more organizations working with IoT data realize the power of AI to automate business decisions. Mix that with the rising adoption of AI technologies like machine learning and the recipe for success is clear.

By embedding AI into our IoT solutions, we’re leading the way in making AIoT a reality.

“Our world is increasingly driven by data and connectivity. The technologies we use must be increasingly intelligent and automated. Artificial intelligence and IoT together – the Artificial Intelligence of Things – is the combination that will drive us forward. SAS helps bring intelligence to the Internet of Things and deliver steeper insights through AI to help organizations in all industries make better decisions.”

Oliver Schabenberger, COO and CTO, SAS
IoT data with AI reduces downtime, helps truckers keep trucking

Unplanned downtime can exact a great toll on fleet operators and customers who depend on timely deliveries. Volvo Trucks North America, including its Mack Trucks division, is strengthening its portfolio of uptime-boosting services by enhancing remote diagnostics with an advanced analytics platform from SAS. The platform supports Volvo’s AI efforts and provides greater capabilities for remote diagnostics users, allowing for more precise analysis and decision making. With the SAS Platform, Volvo Trucks can process millions of records in real time which, on average, helps reduce diagnostic time by 70% and repair time by 21%.

While these IoT services help customers recover from problems faster, analytics keeps problems from arising at all. The trucking company uses SAS to analyze equipment usage and devise optimized maintenance plans for vehicles. Analytics is applied to examine common traits of trucks in the field so improvements can be made in the design of the truck.

70% reduction in diagnostic time
21% reduction in repair time

IoT analytic solutions drive city operational efficiency and sustainability

The General Services Department for the City of Durham, NC, is responsible for building and maintaining city facilities, including design and construction, real estate, maintenance and landscaping. Guided by the city’s strategic plan, which emphasizes sustainability, the department used sensors, analytics and building automation systems to reduce energy consumption and enhance the life cycle of building assets.

Building Clarity—an engineering, construction and analytics company—helps facility owners connect their buildings to business results. Through a partnership with SAS, Building Clarity has access to a robust analytical framework that allows it to provide actionable, scalable insights. The partnership combines technology with unified teams with unique skillsets, including network engineers, data scientists and building engineers. This improves operational efficiencies and reduces overall energy consumption as well as customers’ carbon footprints.

Through data visualization, insights and early interventions, the General Services Department has been able to decrease energy consumption, identify root causes for improvement, deploy facilities teams more strategically to address problems, and extend the life cycle of its mechanical systems and capital cost avoidance.

With SAS, we’re working smarter— we’re seeing things that exist in our information that we couldn’t find before, so we can do things more efficiently and effectively, and drive better results for our customers.”

David Pardue, Vice President of Connected Vehicle and Uptime Services, Mack Trucks

“Our goal would be to take this model and extend it to other facilities to see the same improvements in energy consumption, capital cost avoidance and extension of life cycle assets.”

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Improve decisioning in all industries

Everywhere, organizations of all sizes are seizing the opportunity to empower better decisions and improve lives with analytics.

The list of industries we serve grows longer every year. As the barriers to analytics have crumbled – thanks to intuitive software and attractive deployment options – organizations of all types are expanding their decision-making abilities with analytics. From professional sports teams and consumer lenders to hospitals and hotels, entire sectors are transforming to innovate faster.

As analytics reaches a critical mass, the payoffs have been tremendous – for both balance sheets and society at large. With better fraud detection software, banks can keep your money safe. With better energy forecasting software, utilities can keep your lights on. And with better cancer detection capabilities, doctors can keep your loved ones alive.

With such awe-inspiring power to do great things for humanity, it’s no wonder 91 of the top 100 companies on the 2019 Fortune 500® list use SAS. And it’s not just the giants. More than 83,000 organizations – many of which are small to midsize (SMB) businesses – rely on SAS to fuel growth and drive transformation. Of all the sectors doing great things with analytics, three stand above the rest: financial services, government, and health and life sciences.

Analytics is no longer the realm of major enterprises. As analytics software has become faster and more powerful, it’s also become easier and more affordable. Today, we work with tens of thousands of small to midsize businesses, all of which use analytics in some fashion to improve productivity, streamline operations or innovate faster – often with limited resources.

SAS embeds AI capabilities like machine learning and computer vision into our software to give even the smallest business enterprise-level power and speed. Seacoast Bank is a prime example. By using machine learning software to calculate the lifetime value of each customer, the Florida bank realized a triple-digit ROI from its automated marketing campaigns.

Similarly, nonprofit consulting firm CNM uses analytics to increase revenue, only this story centers on data visualization. CNM helps nonprofits use data to improve their fundraising efforts. For this, the small consulting firm deploys SAS Visual Analytics on Amazon Web Services, thus making intuitive reporting software available online to all its customers.

100% of Fortune 500 companies in these areas rely on SAS®:
Improve decisions in financial services

Banking remains the hottest industry for analytics. And the reason is clear. Disruptive forces such as customer desire for full transparency and complete banking on an app, as well as digitalization, fintech, regtech, open banking and data privacy continue to squeeze traditional banks. Winning banks use AI to thrive in the digital world; to provide personalized, trusted customer experiences; and to meet risk and compliance mandates. Did you know 90% of the top 100 global banks use SAS?

In the field of risk management – where mistakes can cost billions – banks need to make fast and accurate risk decisions to respond to market volatility. Austria’s Raiffeisenlandesbank uses high-performance risk analytics to accelerate risk simulation times. By reducing stress-testing times from four hours to 90 minutes, the bank can perform more simulations in less time, resulting in extremely accurate risk assessments.

Slowing the invisible crush of bank fraud is an endless job for financial institutions. To stay ahead of evolving fraud schemes, banks use embedded AI and machine learning techniques to hunt for fraudulent transactions in real-time data. Thailand bank Krungsri Consumer serves as a shining example. By replacing its fraud detection system with SAS, Krungsri increased its fraud detection rate by 35% and significantly reduced false positives – a major win for customers!

Finally, banks everywhere are leaning on analytics to shape the customer experience. By applying AI to streaming customer data, banks can automate customer experience decisions at scale, enabling personalized interactions across all channels. Sweden’s ICA Banken uses cloud-based customer intelligence software to harvest digital behavior. By anticipating customer needs based on activity, the bank increased conversions for one campaign by tenfold.

ICA Banken

Campaign design cut from six weeks to one day

ICA Banken is a full-service bank with loan, savings and insurance offers for its 750,000 customers. But unlike most of its competitors, the bank has no branches – it meets its customers digitally. This makes understanding customers’ digital behavior, while still following privacy and security guidelines, critically important.

To get a unified view of its customers and create personalized offers, ICA Banken relies on SAS Customer Intelligence 360. Users’ digital behavior, such as interactions on the bank’s app or website, is collected in real time. This is compared to customer data stored in a secure data warehouse. The bank can then show personalized offers to customers based on both their digital behavior and financial situations.

By anticipating customer needs based on activity, the first campaign using the software generated conversion rates 10 times higher than any previous campaign.

“In the past, we could spend weeks developing campaigns that, for various reasons, did not work. Now we can test, reject, redo, try again – it’s fast and gives a huge boost of both productivity and conversion.”

Linus Axelsson CRM manager ICA Banken
Banks have a lot of customer data. The challenge is tapping into it to understand customer value and, ultimately, find new ways to better serve, retain and acquire customers. In order to better understand its customers, Seacoast Bank turned to SAS.

After aggregating and contextualizing its data for analytics, the bank used SAS Enterprise Miner™ to build a customer lifetime value model. The model measures each customer’s value and helps the bank determine how much to invest in reaching that customer while maximizing ROI.

Seacoast then added predictive models and applied machine learning to solve specific business problems, such as personalization at scale. With the SAS Platform, the bank can market to individual customers based on their preferences and transactional history, allowing the bank’s marketers, front-line staff and commercial bankers to better reach customers. And with SAS Visual Analytics on SAS Viya, staff can quickly access and visualize data to create insights.

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“Previously, we could see only one-year trends because we couldn’t feed enough data into the system. With SAS Viya, we can now see four-year trends, which is very important for us. And our processes were so heavy that it took almost a full day to calculate the things we needed each month. The parallel processing of SAS Viya allows us to get that information out much more quickly.”

Robert Stillwell, Analytics Officer, Seacoast

30% growth in risk-adjusted revenue per customer

Faster risk assessment through better decisioning

Compliance only scratches the surface of what modern risk management tools can do. By deploying SAS Risk Management technology, lower Austria’s largest bank Raiffeisenlandesbank gained the ability to make faster and more accurate risk calculations. What does this mean for the bank?

“Driven by the speed of in-memory grid technology, the SAS solution gives Raiffeisenlandesbank a scalable, common computing platform for both credit and market risk assessment. And with SAS Visual Analytics, business users easily drill down into granular levels of detail to explore aggregate risk exposures, asset positions and capital allocations – putting vital risk information in the hands of those who need it quickly.”

Krzysztof Widelka, Head of ICAAP and Limit Management, Raiffeisenlandesbank

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Robert Stillwell, Analytics Officer, Seacoast
Improve decisions in government

In many ways, government is the ultimate case study in analytics. From criminal justice to education to health care to defense - the public sector manages such vital aspects of our society, it must deploy a full array of analytics technology to improve government decision making, mission effectiveness, and resource stewardship in these areas. Did you know every developed country in the world relies on SAS technology to help protect citizens and make better decisions?

The Australian government jumps out as a prime example. Down under, all levels of government use analytics for the greater good. This includes the Road Safety Commission of Western Australia, a unit of the Western Australia Police Force. Facing a growing number of traffic deaths, the agency turned to AI, machine learning and cloud technology from SAS to model traffic changes more quickly and accurately, thereby reducing crashes by 25% in one analysis.

Back in the US, the Delaware State Police is tracking down suspects faster with SAS Analytics. The department uses the SAS Platform to aggregate data from organizational records, collision investigations, traffic citations, criminal incidents and calls for service from every law enforcement agency in the state. The records are searchable and indexable, providing a visual display of patterns and proximity. From rookie cops to veteran detectives, they all rely on SAS technology to expedite and enhance investigations.

Local governments also benefit from emerging technology. In Wake County, North Carolina, employees discovered the power of AI and machine learning to improve property appraisals. Explosive population growth and a shorter reappraisal cycle had put appraisers on their heels. Wake County turned to cloud-based machine learning models from SAS to identify changing market trends every day for every property. Today, SAS technology supplements human judgment to result in timely, objective and highly accurate property appraisals.
AI has become so ubiquitous, even the remote outpost of Western Australia can’t escape it. In this case, the Road Safety Commission of Western Australia uses AI to make roads safer – a lifesaving innovation aimed to combat a recent spike in serious road accidents.

The Road Safety Commission makes policy recommendations based on input from the public and private sector. Previously it relied on human judgment to turn insight into action. With SAS Visual Data Mining and Machine Learning powered by SAS Viya on "SAS Cloud, the agency now uses a machine learning model to calculate the probability of crashes at intersections, allowing it to offer better insight for devising safety measures.

The Commission’s use of powerful, fast and flexible AI has transformed how it fulfills its mission of promoting road safety. By combining the automated accuracy of AI with the nuanced judgment of human intelligence, the Commission prevented 25% of crashes in a pilot analysis, and is on course to profoundly improve the safety of Western Australia roads and save lives.

“In the new model assesses intersections by risk, not by crashes. Taking out the variability and analyzing by risk is a fundamental shift in how we look at this problem and make recommendations to reduce risk.”

David Slack-Smith Former Manager of Data and Intelligence Road Safety Commission of Western Australia

Prison violence drops with analytics-based risk assessment

When the Indiana Department of Correction (IDOC) suffered a spike of assaults against staff members – 320 assaults monthly in an 18-month period – it was clear the department needed a new risk assessment tool. Using SAS predictive analytics to incorporate all relevant data sources, IDOC can now bring dozens of near-real-time risk variables into the equation. With SAS Visual Analytics, staff could access dashboards containing pertinent risk data, allowing IDOC to proactively address issues to mitigate violence. The new tool powered by SAS is four times more accurate in predicting violence than the previous tool. As a result, staff assaults dropped by 50% during a six-month test period. And inmate vs. inmate assaults dropped by 20%.

“By identifying where we can interrupt stressors, we can help reduce violence and put these people in a better situation long-term.”

Sarah Schelle Executive Director of Legislation and Data Science IDOC

50% reduction staff assaults

20% reduction inmate vs. inmate assaults
Every day, nearly 4,000 health and life science organizations across the world apply SAS technology to address the most pressing matters of our time. From AI-powered cancer research and Internet of Medical Things to pandemic-driven demands on health care systems, including virus trends, risk scenarios and health care resources, we’re privileged to provide the tools of innovation to those exploring the boundaries of medical discovery.

In health care analytics, sometimes it’s not the treatment but the work before the treatment that matters most. Such is the case in Australia where the Kids’ Cancer Project uses cloud-based analytics to boost fundraising efforts. By personalizing each donor’s journey, the nonprofit increased donation totals by 34% in one year, money that will be fueled into fighting childhood cancers, devising less-intensive treatments and finding a cure.

Each year, more than 3,000 patients die in Denmark from hospital-acquired infections – an unacceptable statistic, according to Region of Southern Denmark. Using AI, the hospital group seeks to reverse this trend with the world’s first risk modeling system designed to monitor and predict the risk of hospital-acquired infections at a patient level. By knowing who’s most at risk, hospitals expect to reduce the number of infections during hospitalization by one-third.

Every American knows the feeling of dread when opening a medical bill. How much will it be? How will I know the amount is correct? Medical billing innovators RevSpring are demystifying the billing process using advanced analytics and machine learning. By calculating propensity-to-pay scores for each patient, RevSpring personalizes bills according to each person’s unique financial and transactional history, resulting in 10X higher collections efficiency.

Though the COVID-19 pandemic poses unprecedented challenges, analytics provides vital insights based on reliable, timely data. Forecasting medical demand and optimizing response resources are essential to combat COVID-19 and mitigate its devastation.

Cleveland Clinic, a renowned global health care provider, is on the front lines of the pandemic, determined to optimize hospital preparedness before, during and after regional peaks. Cleveland Clinic partnered with SAS to create innovative models that help forecast patient volume, bed capacity, medical equipment availability and more. Armed with this information, Cleveland Clinic is better positioned to support its decision making, addressing the COVID-19 challenges it’s facing today as well as planning for future demands. As the pandemic evolves, the models can adjust in real time – like taking social distancing into account to “flatten the curve.”

The models, which are freely available via GitHub, create worst-case, best-case and most-likely scenarios, informing resource planners to adequately prepare for what’s next. For example, Cleveland Clinic activated a plan that prepared it for the worst-case scenario – it built a 1,000-bed surge hospital on its education campus in Cleveland for COVID-19 patients who don’t need ICU care.

“These predictive models were developed jointly by two organizations that understand patient populations, data and modeling. We are sharing the models publicly so health systems and government agencies globally can use them in their own communities. Our hope is that others contribute their ideas and improvements to the models as well.”

Chris Donovan Executive Director of Enterprise Information Management and Analytics Cleveland Clinic
Better decisions lead to increased funding for childhood cancer research

In Australia, cancer is one of the leading causes of death for those aged 0 to 14 years. Fortunately, childhood cancer survival rates are significantly improving. This is thanks in part to The Kids’ Cancer Project.

The organization, which supports childhood cancer research, saw an opportunity to grow its donation pool and streamline operations. Duplicate records and high list churn were evident in its database – hampering decision making and reporting across the organization. The charity also had hundreds of thousands of underutilized donors.

By switching from Microsoft Excel to SAS, the organization had a cleaner database to make better decisions and automate financial reports. Reporting time dropped from eight days to just two hours – significant operational savings the charity could funnel into helping sick children. Additionally, by optimizing each donor’s journey, the charity was able to grow its regular giving totals to AUD$1.2 million in 2019 – a 34% increase over the previous year and the first time regular giving exceeded $1 million in a 12-month period.

“Analytics gives us the insight to know whether we need to go wider or tighter in our donor communication. Every dollar we raise means more money channelled to fighting childhood cancers, finding less intensive treatments and finding a cure.”

Owen Finegan  CEO The Kids’ Cancer Project

Detecting tumors faster and more accurately with AI-powered decisions

Amsterdam UMC partners with SAS on an AI medical-imaging project to help identify patients with colorectal liver cancer who are candidates for lifesaving surgery. Colorectal cancer is the third-most common cancer worldwide, and in about half of patients it spreads to the liver. Using SAS AI-trained models, Amsterdam UMC physicians will be able to identify with greater accuracy patients who respond well to chemotherapy and become candidates for surgery.

The manual review of medical images of tumors and lesions is time-consuming. A medical-image application on the SAS Platform, using computer vision and predictive analytics, provides evaluation criteria that is more objective, accurate and automated than the current manual review. This application facilitates an improved understanding of disease progression that can save patient lives, save physician time, and provide radiologists with an objective response assessment metric that will provide patients with the best possible care.

“In the future, we may be able to predict the outcome of surgery and overall patient survival. While we are currently using AI technology with colorectal liver cancer patients, AI has the potential to be used in assessing many solid tumor types, including breast and lung cancer. We have only touched the tip of the iceberg.”

Dr. Geert Kazemier  Professor of Surgery and Director of Surgical Oncology Amsterdam UMC
Do great things for humanity

We believe in the power of data and analytics to improve the human condition. Whether that’s donating software to humanitarian groups, volunteering in local communities or educating the next generation of data scientists, we hustle to help those in need.

As an organization committed to social responsibility, SAS is a key player in the Data for Good movement, encouraging use of data in meaningful ways to solve humanitarian issues around poverty, health, human rights, education and the environment.

As the need for analytics becomes increasingly apparent for corporations and nonprofits alike, there remains a persistent skills gap that inhibits development of this needed talent. By 2024, the US economy could be short as many as 250,000 data scientists, according to a McKinsey Global Institute study. Too few students are interested in earning the degrees needed to fill the jobs of the future. And too few are college-ready when they graduate from high school.

SAS is committed to integrating technology into all levels of education to bridge the skills gap, starting with K-12 students. Data is everywhere and is the driving force behind much of today’s innovation, but rarely do students have the opportunity to understand data beyond charts and graphs alone. Thus, rarely are students achieving data literacy.

With 44 states introducing computer science standards and employers endlessly seeking data-literate candidates, students desperately need more opportunities to practice their data skills in authentic, meaningful experiences. As the global analytics leader, SAS is uniquely positioned to be a pioneer in educating students on data literacy. We are committed to developing relevant resources for data literacy, computational thinking and coding to educate the future data scientists of the world.

Through SAS, educators are introducing data literacy and technology programs to children at earlier ages. Apps like CodeSnaps use robots to teach basic coding skills in a fun and engaging way. At the university level, SAS offers free academic software, teaching and learning materials, analytic degree and certificate programs and scholarships to entice more analytics graduates. Our $1 billion investment in AI, announced in 2019, focuses in part on skilling up the workforce and helping prepare the next generation. Now more than ever, we’re committed to building a global community of innovators through education to solve the challenges of tomorrow.

With GatherIQ, SAS is bringing global issues into the classroom. The free app details 17 global Sustainable Development Goals set by the United Nations for a better world, and shows what organizations are doing to address them. Users can download the app to learn more about the goals while exploring global issues through interactive data visualizations, quizzes and other multimedia activities to help groups like Girls Who Code, Rise Against Hunger, Water for Good and Zoe Empowers.

gatheriq.analytics
Education

The rise of new, advanced technologies demands the generation of new, advanced skills. SAS strives to meet that demand by helping people from around the world skill-up to take advantage of the analytics economy. SAS makes it easy to build these highly coveted skills by targeting worldwide education initiatives in STEM to ensure the next generation of innovators has the knowledge and abilities to succeed. For elementary and secondary school-aged learners, SAS offers high-quality, free resources for data literacy, computational thinking and coding.

Teaching and learning. Whether you’re a teacher, professor, student, academic researcher or independent learner, we offer anyone in a teaching and learning environment free and low-cost options for accessing our world-class analytics software, training resources and online communities. For institutions wanting in-house software and data for teaching and academic research, the Education Analytical Suite provides comprehensive SAS foundational technologies via reduced-cost enterprise licenses. SAS Vaia for Learners offers free access to AI and machine learning for academic institutions.

Degrees and certifications. We have partnered with colleges and universities to develop more than 300 joint programs in analytics and related disciplines. The SAS Academy for Data Science offers online, flexible training to help people earn valuable credentials like SAS Certified Big Data Professional, SAS Certified Advanced Analytics Professional and SAS Certified Data Scientist. Global customer demand for certification from SAS continues to grow with more than 150,000 SAS credentials awarded. In 2019, 60% of all exam attempts were by students, indicating strong interest in SAS from the next generation of analytics talent. New performance-based testing allows candidates to write and execute actual SAS code in an exam, making the credentials more valuable to candidates and employers.

Communities. Our customers are critical to SAS innovation and in helping those who want to expand their analytics knowledge. A 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 for how to use SAS software, as well as “best practice” approaches to analytical problems. The SAS Analytics U and SAS Certification communities connect students and independent learners with resources to develop and certify their SAS skills. Launched in 2019, the New SAS User message board has quickly become one of the most popular communities destinations. These global connections among professional and student users help to advance the experience and expertise of SAS practitioners.

Data and digital 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. SAS has joined forces with the News Literacy Project, which works with educators and journalists to help students become responsible consumers of media. SAS is the organization’s official data literacy partner to ensure students are able to comprehend and critically analyze data as it shows up in the media.
SAS was founded on the principle of using analytics to change the world and remains committed to helping solve critical global issues using data and analytics. With SAS’ help, medical facilities and research organizations can improve patient treatments and outcomes; financial institutions can address bias in loan decisions; and government programs can protect populations at risk of opioid addiction.

There is widespread evidence that analytics also helps achieve short- and long-term development goals around the world. Poverty, disease, hunger, illiteracy, and many other global development challenges all benefit when analytics are applied. As the global leader in analytics, SAS jumps at the opportunity to apply our technology and expertise to help solve some of society’s biggest problems.

SAS’ social innovation initiative works to find creative ways to accelerate global progress and move the world toward a more sustainable future. Whether working with Zoe Empowers to help equip orphans with tools and training to overcome poverty, using analytics to help Water for Good and water poverty or helping the Special Olympics keep athletes safe with IoT health devices, SAS is contributing to building a better world for the people and the planet.

Our social impact programs rely on the curiosity and expertise of SAS employees who are passionate about 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.

SAS also works to support the next generation of innovators, introducing young learners to data, how it can be used to better understand global issues, and how to turn those insights into action in their own communities.

Advancing mental health care with predictive analytics

The Centre for Addiction and Mental Health (CAMH), Canada’s largest mental health teaching hospital, is working to remove the stigma from mental illness and addiction while providing world-class care to those in need.

With the goal of improving clinical outcomes and streamlining operations, CAMH started using SAS Analytics to manage, model and visualize its data across various projects. CAMH analyzed emergency department activity and discovered visits had jumped 82% in the last six years. Then, it began modeling Ministry of Health population data to predict future activity, allowing officials to devise the right care models and process optimization projects to accommodate future needs.

The team also used SAS to optimize care for alternate level of care (ALC) patients – people who occupy acute care hospital beds but no longer require hospital care. The predictive model they built was 80% accurate, streamlining treatment for ALC patients and optimizing bed space.

The organization forecasted the expected number of patients and operational needs for a new bridging clinic. The analysis helped secure 100% government funding.

“Our partnership with SAS has really helped us give people a very strong impression of the ‘art of the possible’ when it comes to data.”

Rebecca Comrie, Executive Director of Performance Improvement, CAMH
Building a legacy of inclusion with data-driven technology

In 2019, over 7,500 athletes from 190 countries competed in the Special Olympics World Games in Abu Dhabi. For the organizers, there were challenges to providing an extraordinary experience, such as scheduling transport and accommodation, maintaining spectator satisfaction and ensuring athlete health and safety. The Special Olympics partnered with SAS to address these challenges with an artificial intelligence, advanced analytics and data management platform. During the games, athletes wore a smart watch that streamed IoT-level data to a central dashboard that medical professionals observed. Organizers applied SAS AI solutions to streamline the data to predict when health issues might arise, allowing them to strategically position health personnel near certain athletes. When serious incidents like seizures and asthma attacks occurred, quick response times aided by analytics were crucial. Organizers used real-time data streaming from ticketing, travel and guest management systems to send the 500,000 spectators personalized tips and recommendations. Organizers analyzed fan sentiment with text analytics software that combed through 68 billion social media impressions, allowing for improved communications during the event and data-driven policies after the event. “Using the latest data-gathering methods to monitor our athletes and other constituents enables us not only to deliver excellence at the World Games, but it creates a legacy of valuable data that will help us redefine the future of the Special Olympics movement.”

Peter Wheeler CEO Special Olympics World Games Abu Dhabi 2019

Providing a smooth transition for military veterans

Each year, hundreds of thousands of service members transition back into civilian life. For many, this is a time of uncertainty around establishing a new career and securing needed resources and support for a successful transition. Launched in 2011 at Syracuse University, the Institute for Veterans and Military Families (IVMF) is committed to advancing the lives of veterans and their families. The institute uses SAS Analytics to drive programs and operations, enabling greater insights into impact on those it serves. With a central analytics and data management platform, the IVMF can generate and distribute insights more quickly across the organization and to stakeholders and partners. This allows the staff to focus on more strategic best practices for their data management and reporting efforts, helping to drive decision making with strong measurement and evaluation. Underpinning the technology is SAS Viya, an analytics framework that allows everyone – data scientists, business analysts, developers, executives, funders and stakeholders – to collaborate and realize innovative results faster. “One obligation we have when they take off that uniform should be to knock down as many barriers as possible. Everything we do at the IVMF is about knocking down those barriers, and SAS is key to this mission.”

Dr. Mike Haynie Vice Chancellor for Strategic Initiatives and Innovation Syracuse University Executive Director Institute for Veterans and Military Families
SAS has always been committed to innovation, treating employees well, and environmentally friendly business practices. 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, diversity and inclusion.

Commitment to employees, communities, education and the environment has been rooted in our DNA since day one. It drives the innovation that we provide to our customers and makes a positive impact on the world.

About SAS

Our customers’ businesses rely on relationship stability and strength in tenure to deliver trusted expertise and innovation. SAS’ world-renowned workplace culture has always directly contributed to innovation and satisfied customers.

This culture of flexibility, trust and values nurtures a dedicated global workforce critical to addressing our customers’ business needs and solving world problems.
Sustainability

Since our early days, SAS has been a sustainability innovator through environmental, social and economic efforts. We work closely with employees, suppliers and customers to foster an award-winning, sustainable workplace that has a positive impact on our future. SAS reduces its environmental footprint with multiyear programs focused on energy conservation and solar projects, emission management, pollution mitigation, water conservation, waste reduction and recycling, procurement and green building.

3.5 million kWh
Renewable energy generated annually from solar installations

More than 100 FREE
on-site charging stations for plug-in electric vehicles

82%
of all office and data center space at SAS world headquarters is LEED® certified. SAS remains dedicated to green building standards, aspiring to LEED certification in both new construction and renovations.

48
beehives to boost honey bee populations in urban areas worldwide.

Smart people, smart building
Latest construction at SAS world headquarters uses SAS Event Stream Processing on real-time neural network models to analyze building-wide sensor data related to energy/water usage and the functioning of key components.

SAS Environmental Goals

- Reduce greenhouse gas emissions by 25% by 2025
- Improve office building efficiencies by 40% for energy
- Continue investment in more smart technologies, renewable energy, EV infrastructure and environmentally friendly practices
- LEED® Gold certification for all new buildings
- Report progress in support of the Paris Climate Agreement

BY 2025

Reduce greenhouse
gas emissions

40% for energy

Continue investment
in smart technologies,
renewable energy,
EV infrastructure and
environmentally
friendly practices

LEED®
Gold

Report progress in
support of the Paris
Climate Agreement

50% for emissions

Reduce greenhouse gas emissions by 25% by 2025

Continue investment in more smart technologies, renewable energy, EV infrastructure and environmentally friendly practices

LEED® Gold certification for all new buildings

Report progress in support of the Paris Climate Agreement

50% for emissions
SAS is continually recognized for providing an inclusive and enriching work environment that ignites employees’ creativity, giving them the opportunity to change the world.

SAS is considered a best place to work globally for:

**Women**

A team of employee volunteers from the SAS Black Initiatives Group uses SAS technology to contribute analytical expertise to help the Center for New York Neighborhoods, a nonprofit organization supported by Citi Foundation. These volunteers, some of whom have firsthand experience with the New York City housing crisis, are working to better understand the affordable housing crisis in New York City and uncover ways to keep more low-income families in their homes.

**Diversity & Inclusion**

SAS actively develops and engages women, offering training, consultation, mentoring and networking opportunities that address the needs of women in the workplace. In addition, we provide many benefits to help employees integrate work and life, and have several initiatives that support women including:

- The Women in Analytics Network program to strengthen diversity in the analytics field.
- The Women’s Initiative Network (WIN), a strong community of SAS employees who empower, encourage and inspire women to pursue excellence in their careers.
Growth and Innovation

As the leading AI and advanced analytics platform, SAS continues to innovate relentlessly. We’ve aligned our company behind one common goal: to help customers realize the full potential of their AI and analytics investments. This commitment has supported the profitability, stability and growth of the company for decades. More than 83,000 organizations rely on SAS to help them make better decisions.

The year 2019 represented significant transformation for SAS, driven by a transition to cloud-based technology and related pricing strategy, as well as financial accounting changes. SAS began adjusting its pricing strategy to smooth multi-year revenue pricing more evenly over contract periods, which is consistent with cloud pricing across the industry. SAS also adopted the new accounting standard for reporting revenue referred to as ASC 606 that changed the timing of when revenue is recorded. As a result, SAS revenue in 2019 was relatively flat, growing .5% in constant currency. In USD, SAS revenue was $3.1 billion, reflecting accounting and pricing changes, as well as the impact of exchange rate changes.

Initiatives SAS targeted for investment performed very well. SAS experienced double-digit revenue gains in AI software and solutions for IoT, risk management and fraud and security intelligence. Cloud revenue rose as well, reflecting customers’ appetite for cloud-ready solutions like SAS Customer Intelligence 360 and SAS Viya to modernize their analytics environments.

In 2019, we committed to invest $1 billion in AI innovation over three years. That investment continues to pay off as customers realize the benefit of innovation, education and services to optimize ROI on AI projects. We’ve also expanded our channel program to give customers the full power of our partner network. In 2019, SAS partners influenced 56% of new sales, and half of our top 50 deals.

Analytics remains a hot industry, and we’re redoubling our efforts to remain the undisputed leader in this space. We continue to reinvest an average of 25% of revenue back into R&D - double the average of large technology companies - to create innovative products, improve customer experience and help our customers digitally transform to meet the needs of tomorrow.

2019 growth influenced by:

- AI
- Cloud
- CI
- Financial Services
- IoT

56% of 2019 new sales influenced by partners.
91 of the top 100 companies on the 2019 Fortune 500 list are SAS customers.
27% revenue reinvested in R&D

Continuous innovation and customer commitment has propelled 44 years of consecutive growth for SAS.
SAS commits time and resources in areas we believe will make a lasting positive impact in the world

We are committed to:

Innovation
When people are empowered with knowledge, no challenge is impossible. So we invest nearly twice the percentage of annual revenue in R&D as most major tech companies.

Data for Good
From helping resolve critical humanitarian issues and our dedication to green building and conservation initiatives, to changing conversations around behavioral health and protecting at-risk children, we believe data and analytics make lives better.

Education
Our commitment to education is a natural extension of where we came from and what we do. SAS supports global education initiatives that promote learning for all and build a global community of innovators.

Diversity and inclusion
At SAS, diversity is more than just gender or race. Our culture blends different backgrounds and experiences from 58 countries globally. We want everyone to feel confident in expressing their ideas, and know that they will be respected for their unique contributions and abilities.
Do great things with data. With analytics. With SAS.