

SAS[®] Results Delivers Value



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Every organization is learning to wade through more data - and increasingly complex data - to make the business decisions necessary to improve operations and stay competitive. This data can be an incredible source of insight - if you have the tools, skills and expertise to understand how to turn that data into information you can use.

SAS understands that not every organization has that mixture of resources and capabilities to make the most of their data. To help these organizations, SAS® Results is a service designed to deliver analytic results to key business problems or initiatives.

Unlike traditional software deployments, SAS Results is not a one-size-fits-all service delivered to multiple organizations. SAS Results combines the SAS Analytics platform with the know-how from SAS experts to get quicker and deeper insight from existing data. The flexible delivery model lets you apply SAS technologies in the way that meets your business and IT needs.

Building on a foundation of analytics

Any business decision starts with data. Organizations often build data structures to help them access the information locked away in operational systems. Often, only a subset of data is used, based upon past experience. This information is then used to drive standard and ad hoc reporting.

While this traditional reporting has value, it only provides a historical view of the situation. Real-time has more value, as you are looking at today's data and making decisions based on more immediate information, but even this only gives a view of the situation today. The advanced analytics provided by SAS Results allows you to go further.

SAS® Results: The right tools for the job

SAS Analytics goes beyond traditional reporting by providing the capability to understand why things are happening, predict the likelihood of an event occurring in the future and enable organizations to optimize their performance. For organizations looking to maximize the impact of their analytics efforts - and see more immediate results - it's important to have all the tools necessary to exploit your data.

SAS Results provides not only the analytics expertise, but it also gives you the capabilities within the entire SAS software platform. This enables our experts to use the best software and take the best approach to deliver the best result.

There are multiple options to deliver SAS Results. You can use a secure, cloud-based service on your behalf or deliver SAS Results on-premises. Either way, you get the benefits of SAS Analytics software, operated by SAS experts. The services are regularly reviewed and audited to ensure your data is secure, regardless of the deployment option.

With these deployment options and the backing of knowledgeable SAS professionals, SAS Results addresses the issues that typically prevent organizations from implementing an effective analytics platform. From a lack of skills to a complex IT environment, these problems are common across organizations in any industry and of any size.

SAS Results combines the SAS Analytics platform with the know-how from SAS experts to get quicker and deeper insight from existing data.

Fill the analytical skills gap

Too often, organizations don't have the right mix of skills to manage, investigate and analyze their data. Analysts are becoming an increasingly scarce resource. As organizations realize the benefits analytics can provide, the demand for well-trained and experienced analysts is only increasing.

However, the problem organizations face is that the supply is not meeting demand. A recent study from McKinsey [pointed out](#) that 86 percent of executives say their organizations have been, at best, just "somewhat effective" at meeting the goals of their data and analytics programs.

By providing access to SAS experts, SAS Results provide an option for organizations facing any of these challenges.

- Analysts are hard to find in an increasingly competitive marketplace.
- Organizations may not need full-time analytics employees on staff when they are used only sporadically through the year.
- Analysts and data scientists are a unique skill set to develop and manage - and organizations may want to avoid these complexities.

Address limited IT support

Another issue facing organization is the lack of supporting resources required, particularly in IT. Organizations often face a shortage of skills and resources in a variety of areas, including:

- The availability of data centers and other hardware environments.
- The IT skills or availability to manage the required hardware for an analytics environment.
- The skills and technologies to manage and integrate the required data.

SAS Results provides multiple delivery options through cloud-based or on-premises engagements. The available options free your IT team to focus on other projects that are important to your enterprise.

Solve complex problems with complex solutions

Sometimes, an organization has the tools and resources to face their analytics challenges. But the problems are too difficult and require a level of expertise that outstrips on-site resources. This could include new or emerging problems, or you may be facing a problematic area that is often overlooked but needs to be addressed.

SAS Results gives you access to highly experienced and trained analysts. These professionals have learned from working with our global client base to solve a variety of challenges in practically every industry. After over 40 years as a pioneer in analytics, SAS professionals have the expertise to find a unique solution to your business challenges.

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Achieve faster time-to-value

Any IT project takes time to setup and configure hardware and software environments. This involves recruiting staff, scheduling the time of existing staff, purchasing additional software, implementing that software, and so on. That's why some projects take months - even years - to deliver value.

Through a services-oriented approach, SAS Results provides more options to help you see value today. Cloud-based deployment negates the need to install software on-premises. And access to SAS professionals gives you the knowledge and know-how to find the fastest route to true insight.

Manage capital resource investment

Any business decision - including starting or refining an analytics program - will ultimately come down to money. However, for many organizations, it's the budget that these initiatives hit that causes problems. These issues focus on:

- Fixed costs that can't be "turned off" quickly.
- Capital investments in hardware and, for some companies, software.
- Headcount, particularly in analysts, data management and IT.

Because SAS Results is a service, organizations can often consider the analytics program to be an operational expenditure, not a capital outlay. The fixed costs are lower, providing more flexibility to expand or adjust the strategy in the future.

Typical solutions for SAS® Results

SAS Results capitalizes on SAS' vast experience delivering analytics projects across a number of industries. SAS Results has delivered solutions in a number of different business areas, tackling many different types of business problems. One of the benefits of SAS Results is that it is not limited to any particular problem. However, there are some common business issues that have been solved by previous SAS Results engagements.

Forecasting, optimization and variability analysis

For organizations that need to produce numerous forecasts with a high degree of accuracy, the forecasting process can be problematic. Inaccurate forecasts can lead to excess inventory, poor product availability, poor customer service and increased costs.

With SAS Results, SAS experts can help you examine historical data and associated events. Then, the team will generate forecasts and deliver these to your team at the speed and frequency you need.

Fraud prevention

Detecting, preventing and managing fraud - whether in banking, insurance or any other industry - is a growing problem. As more organizations conduct business more online, the dangers from fraud only increase.

For organizations wary about their fraud detection capabilities, SAS Results delivers an analytics service that can adapt as fraudsters become more sophisticated by using a hybrid analytics approach. SAS Results provides you with the industry's leading solution without affecting your existing IT systems.

Because SAS Results is a service, organizations can often consider the analytics program to be an operational expenditure, not a capital outlay. The fixed costs are lower, providing more flexibility to expand or adjust the strategy in the future.

Customer insight

Relevance is the ultimate goal of customer interactions. More relevant communications lead to higher response rates and increased revenue. Depending on your channel choice, it can also reduce costs and make your customers more likely to engage with you over time.

To reach this level of marketing, you need to personalize the way you interact with your customers. But you may not have the time, skills or resources to use analytically driven segmentation and behavioral modeling. SAS Results can get you started, delivering customer insight through segmentation, churn prediction, social network analysis, up-sell, cross-sell or customer acquisition analysis.

Marketing optimization

Customers are drowning in information and campaigns coming from marketing organizations. This is made all the more complex by the additional channels over which we now interact. Consumers are receiving information via desktops, laptops, e-readers, tablets, mobile phones and kiosks. This makes it more difficult to maintain loyalty and market effectively. Most customers are fickle and will leave your service for another that provides something similar at a small price discount. So how do you maintain brand value while retaining customers? SAS Results: Marketing Optimization enables you to maximize your marketing objectives and goals while meeting business constraints without deploying or configuring any software. SAS Results will help you determine the optimal offers, through the right channel at the right time for customers. We can also provide insight into the implications of changing business constraints, such as budget, channel capacity and contact policies resulting in an increased marketing campaign ROI.

Getting started with SAS® Results

At the outset of the project, SAS will work with you to understand the data you have, the problems you are facing, and the answers you need. This initial phase normally takes place in a workshop involving both business and IT teams. The workshop outlines the data sources and the exact deliverable that would be produced by SAS.

Deliverables can include a number of assets depending on the project and the situation, including:

- Presentation of results, including recommendations and insights from SAS experts.
- A review and discussion of the results based on a defined business problem/question.
- A predictive model or data table containing analysis output.

With SAS Results, the deliverables are fit for purpose – in the right format, at the right time and for the scope of the project.

After completing the workshop and establishing a set of deliverables, SAS will work with you to assess and explore the data. The team will make sure that the data is fit for purpose to answer the specific questions identified earlier. Once there is agreement on the scope and deliverables provided, the project starts.

SAS Results provides a faster path to results due to the strengths of the program. A dedicated team of advanced analytic experts supports the project, pulling from a staff that has advanced degrees in mathematics, statistics, operations research, econometrics, etc. The project can also use a network of resources with significant experience in analytics, industries and data types across the world.

By taking this proven approach to analytics, SAS Results gives you:

- Expert help. SAS Results gives you the knowledge and expertise to help you address your most difficult business issues.
- Access to skilled resources. Many organizations struggle to recruit and retain analytical talent. SAS Results provides access to the SAS professionals who have the skills you need to optimize your analytics efforts.
- Fast turnaround. It can be difficult to get the right blend of IT and business to deliver answers to key questions. SAS Results combines technology and business expertise to deliver more powerful solutions.
- Delivery options. SAS Results provides multiple delivery alternatives through cloud-based or on-premises engagements.

SAS® Results: Customer Experiences

Forecasting, optimization and variability analysis

Travel - predictive forecasts match supply with demand

The travel sector can be hit hard by drastic fluctuations in consumer demand: Seasonal and even weekly variations in customer behavior can be caused by the weather and other factors. With no analytics expertise in-house, one UK operator didn't understand the factors influencing demand and how it could adapt quickly to both avoid losses and actively profit.

SAS Results explored untapped data assets including passenger totals, demand fluctuation and pricing. They used this data to create accurate predictive models that forecast the impact of changes to help optimize customer numbers and revenue. The operator achieved greater control and new revenue opportunities, with the ability to respond fast to events (such as the Icelandic ash cloud) with new offers and pricing, leading to increased customer numbers, better use of its fixed-cost infrastructure and improved customer satisfaction.

Banking - optimizing cash machines to improve service

It is important for retail banks to ensure ATMs are stocked with cash appropriately. Too much and it's "dead money," but too little and you risk annoying customers or, worse, pushing them to competitor machines - where they could respond favorably to an attractive on-screen loan or mortgage offer.

SAS Results was used in a "forecast and optimize" project to predict ATM usage in different circumstances, and then plan and optimize routing and delivery schedules of cash. Other organizations have since applied a similar approach to their own logistics and supply chain optimization activity. The goal: getting the right items to the right place at the right time to meet demand.

Fraud prevention

Hotels - fraud prevention protects revenue

The fraudulent use of credit cards meant a loss of revenue for this hotel chain, which aims to operate at optimal levels. Fraudsters used cloned and stolen card details to make phone bookings and either used the rooms before the criminal activity was detected or sought cash refunds from the hotel booked.

SAS Results delivered a proof-of-concept project to analyze large volumes of "normal" transactional data plus transactions later known to be fraudulent, helping identify patterns and characteristics of the criminal activity. The success rate was outstanding, with SAS Analytics looking at specific words, tone of voice and other factors to accurately identify up to 95 percent of fraudulent transactions made via the call center. This meant active fraud prevention for the hotel chain - not just fraud detection.

Banking - combating online fraud

With online banking, the amount of fraud perpetrated online has been steadily rising. Fraudsters can easily operate anonymously, often out of reach of the relevant authorities. Often, fraud involves an element of collusion with employees as well.

A major UK bank turned to SAS Results to help combat the problem. SAS was able to provide behavioral profiling of accounts using transaction velocity, call patterns and geographic analysis to build a "risk score" to identify high-risk accounts. Business departments gained the ability to build their own reports and analytics for fraud exposure, investigator statistics and mobile reporting.

Customer insight

Health care - segmentation means profitable customer insight

A health care provider spent money on market research to learn more about customer lifestyle and behavior but couldn't apply the segments its agency provided to its overall customer base. The company also could not gain new insight to differentiate offerings and enhance campaign offers. With a limited analytics capability, their customer optimization efforts could only go so far.

Attribution models from SAS Results accurately identified segmentation factors and assigned each customer to the appropriate segment. The provider gained far more detailed and subtler insights about individual customers, their circumstances and likes/dislikes. This allowed the health care provider to develop and target offers, including different pricing levels, more closely matched to customers, which increased uptake.

Retail - insight from the point-of-sale boosts marketing

A medium-sized retailer's business model was overly dependent on a core group of loyal customers buying its leisure equipment and clothing. With a highly seasonal business, the retailer had no insight into buying behavior. It wanted to increase the value of loyal customers by making the right offers at the right time.

SAS Results examined point-of-sale data to segment customers accurately: regular low-value shoppers, high-value infrequent shoppers, one-off purchases, “big-ticket” buyers, and so on. This insight meant the retailer could identify and track its most loyal customers, target campaigns more effectively and make appropriate offers to build their value.

Energy - smarter use of a flood of utility data

Energy providers want to roll out new smart meters to millions of consumers - where they will deliver the greatest benefits in the shortest time. These companies also want to use this new technology (and the flood of data it will generate) to help find ways to improve customer service, enhance business performance and increase profitability.

One energy provider engaged SAS Results to identify behavioral customer segments with different energy usage patterns, allowing the provider to develop a range of cost strategies and campaign offers targeted at the precise needs and usage patterns of different groups. These insights are helping the company develop effective, scalable strategies for the roll out of smart meters, and actively benefit from even greater insight as transactional data volumes increase massively.

Online retail - data powers a recommendation engine

A company with an online retail platform was failing to engage with its customers effectively. Due to unattractive and irrelevant offers, customers weren't staying on their website. With no means of mapping and measuring each customer's digital experience to make improvements to the website, online sales channels were suffering.

By using SAS Results, the company was able to implement a recommendation engine that tailors offers to suit the individual based on their online behavior. SAS was also able to successfully combine data from multiple systems in varying locations. This helped to create precise customer lifetime models and deliver personalized promotions.

To contact your local SAS office, please visit: sas.com/offices

