

SAS® Results: Analytic Insights

Give us your problem and your data – we give you fast analytical answers



Everyone knows they need to take advantage of data assets and analytics to find better answers to problems and gain insights that lead to competitive advantage. But not everyone has everything they need to solve high-value or high-priority issues quickly.

Maybe you've got resource constraints. Demand for analytical talent is on the rise and is expensive to hire and retain. Your organization may not have an in-house analytics team at all. Maybe your IT department doesn't have the necessary hardware or staff required to devote to your immediate, perhaps complex, business problem. IT-led projects often take 6-12 months to implement but people need answers now.

SAS Results: Analytic Insights delivers insights in a fraction of the time without anyone in your organization having to interact with technology. There's no need to invest in software tools, hardware, IT overhead and support, data scientists or modelers. Your organization provides the data and the problem to be solved. And SAS delivers the results.

With SAS deployed in this way, solving business problems is much faster. Top analytical experts from SAS can complement your organizational skills and knowledge, as if they were part of your own team, helping solve business problems more quickly than ever before.

SAS Results: Analytic Insights helps organizations take advantage of trends and turn them into knowledge. Whether this involves profiling and segmentation, retention, response modeling, visualization, fraud or forecasting, SAS Results can help.

Challenges

- Big data and complex problems.** Organizations sometimes find it is cumbersome to manage the massive amounts of data generated by retail and web systems (among others). Or, the problems that need to be solved might prove too difficult and require a higher level of expertise that you have available in-house.
- Analytical skills gap or staff limitations.** Too often, organizations don't have the right mix of skills to manage, investigate and analyze their data. There aren't enough analysts and IT staff to support key projects because they are focused on the day-to-day running of the organization.
- IT infrastructure.** Current IT infrastructure often operates at capacity or is not designed to handle heavy-duty analytical computations. And even if the infrastructure is sufficient, it always takes time to set up and configure hardware and software environments. Maybe you don't have time to wait.

What Is SAS® Results: Analytic Insights?

SAS Results: Analytic Insights is one of our results-as-a-service offerings. It combines the expertise of SAS services with our award-winning analytics software, and identifies previously unknown patterns and trends in your data that could affect your organization.

This service provides a foundation for definition and discovery of critical information that will help you know your customers – and your organization overall – to give you the edge you need to compete effectively in today's rapidly changing marketplace.

Our expertise and powerful analytics solutions are provided as a service in a deployment framework customized to suit your organizational needs.

Together, we work to understand the challenge you'd like to address. Working with your data, SAS takes care of transforming data, creating analytical models and developing rules. We also manage your rules and models using industry best practice methodologies.

Our experts apply the optimal analytics techniques to your data, such as business rules, anomaly detection, predictive modeling, text mining, database searches, exception reporting and network link analysis. We can also provide regular alert management reports.

Flexible Delivery

There are multiple options to receive SAS Results: Analytic Insights. You can use a secure, cloud-based service or have results delivered on-site via SAS Remote Managed Software and Services. Either way, you get the benefits of SAS Analytics software and our analytical expertise. The services are regularly reviewed and audited to ensure your data is secure, regardless of the deployment option.

SAS® Results: Analytic Insights Options

SAS Results: Analytic Insights capitalizes on our vast experience delivering analytics projects across a number of industries. One of the benefits is that SAS Results is not limited to any particular problem. However, there are some common business issues that have been solved by SAS Results: Analytic Insights engagements. Here is a sample of packages that customers are already seeing benefits from.

Recommendation Engine

Research shows that 60 percent of people use recommendations when purchasing. The algorithms driving such recommendations are often complex and require heavy computation, dealing with thousands of products and potentially millions of customers.

Organizations often promote the most popular items at the current time to all visitors on their website. Unfortunately, this isn't relevant for most customers and shows the organization isn't using its knowledge of the customer's purchase and online behaviors. Customers who don't see anything of interest may move on to another website.

Using the SAS recommendation engine, results can be personally tailored to individuals based on their previous purchases, browsing history and sought-after recommendations. The models continue to learn, without user intervention, and can provide an immediate response to new campaigns and promotions.

- For many organizations, the IT and analytics burden is simply too onerous to manage. However, the rewards from increased product sales and identifying

profitable niche groups of customers can be phenomenal. This is where SAS Results: Analytic Insights can help by providing the necessary hardware, software and analytical skills.

Benefits

- Increase average customer basket size by identifying relevant products.
- Identify profitable groups of customers.
- Find new ways to delight customers by recommending products that resonate with their interests.
- Generate greater customer and product insight with easy-to-use web and mobile dashboards.
- Improve your competitive position through greater relevance and customer satisfaction.

Social Network Analysis

For organizations that need to analyze numerous customer social networks, the analysis and reporting process can be problematic. There may be too few skilled analysts or too many social networks for existing staff to analyze within a reasonable time frame. Unfortunately, subject-matter experts may be using intuition to identify product advocates or customer segments.

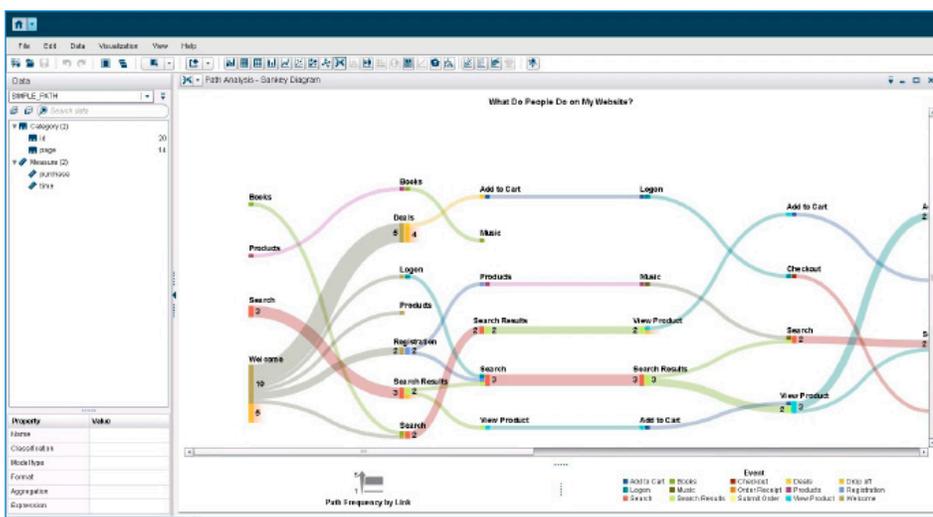
These factors can have a detrimental effect on marketing campaigns, which leads to poor customer service or a lack of understanding of how customers and groups of customers interact with each other.

With SAS Results: Analytic Insights, you send us your historical customer interaction data. We generate your social networks and deliver these back to you in a timely manner and at the frequency you require.

Social networks will identify customer groups and segments that help you understand how social networks have developed over time, which customers are leaders or followers, information bottlenecks, size of networks and similar measures that will enable better decision making. Social networks can be explored visually or results exported into data files, which could then be integrated with marketing, sales or forecasting models.

Benefits

- Increase sales revenue by targeting the right individuals and groups.
- Find groups of customers that are dissatisfied with products or services.
- Improve the performance of traditional churn or cross-sell models.
- Identify profitable niche groups of customers.
- Find new ways to delight customers by recommending products that resonate in their group.
- Generate greater customer and product insight with easy-to-use web and mobile dashboards.
- Improve your competitive position through greater relevance and customer satisfaction.
- Understand how customers interact with each other.



SAS Results: Analytic Insights uses your data and provides a customized recommendation engine for your organization's needs.

Energy Forecasting

In complex, competitive and regulated energy markets, there's a very clear link between forecast reliability and an energy company's bottom line. Improved forecasting performance generates tangible value in areas such as planning, operations, the energy market and demand response.

SAS Results: Analytic Insights for energy forecasting provides very short-term (VST) and short-term (ST) forecasts in a single subscription. You provide the historical load data and associated events, and SAS returns a forecast of load hour-by-hour for the next period selected.

Benefits

- Automated model selection based on rigorous evaluation of hundreds of possibilities minimizes time spent on analysis and maximizes accuracy and economic impact (financial position).
- Consistent, transparent forecasting methodology based on your specific load data.
- Customized weather data that matches your service territory (optional).
- Formatted results ready for consumption by operational systems.

- Automatic backcast to monitor ongoing forecast performance.
- Easy, secure data transfer between parties in a standardized format.
- Access to forecasting expertise for support.

Forecasting

Producing numerous forecasts with a high degree of accuracy can be difficult. There may be too few skilled analysts or too many forecasts for existing staff to analyze within a reasonable time frame. Subject-matter experts may be using their intuition to generate their forecasts, or there may be a lack of understanding about which events and factors are influencing demand. All of these factors have a detrimental effect on forecast accuracy, which leads to excess inventory or poor product availability, poor customer service and increased costs.

Benefits

- Improved customer service through reduced wastage and inventory. Combining historical data and advanced analytical methodologies produces forecasts that reflect the realities of your business, so you can plan future events with confidence.

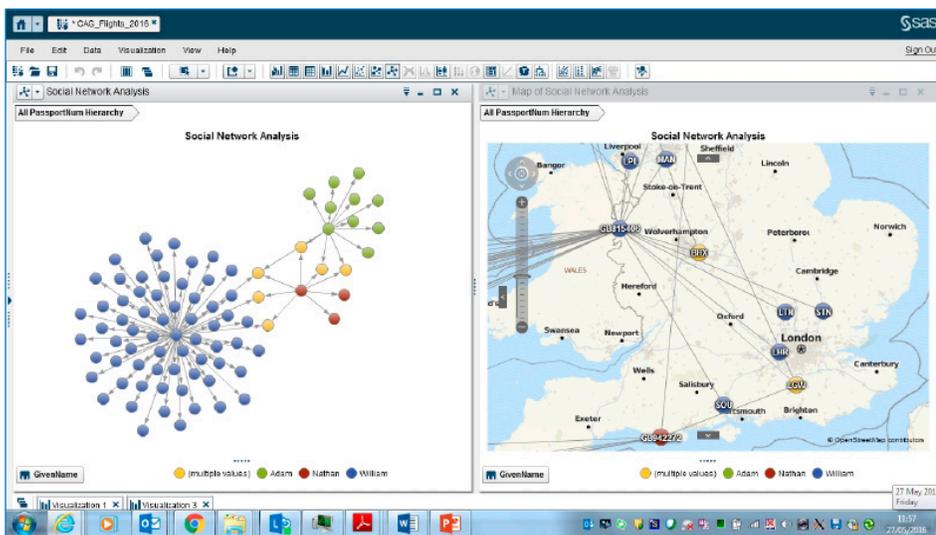
- Knowledge transfer. We'll take care of the analytical legwork and work collaboratively with you to use your knowledge of your organization and the market in which you operate.
- Quick start. Our forecasting software is already installed within a cloud infrastructure, eliminating the time and effort needed to create a forecasting platform. This service takes advantage of our large-scale forecasting engine and our industry-aligned forecasting experts. The costs of hiring scarce analytical resources, procuring forecasting software and buying dedicated hardware are eliminated.

Emerging Issues Detection

Direct warranty costs associated with product quality are an expensive issue for manufacturers. Indirect costs include customer dissatisfaction, poor brand image, lawsuits and lost sales. Issues often take months to detect, and resolution is too slow. But industry analysts have shown that leading manufacturers drive value using analytics to detect emerging product quality issues.

With SAS Results: Analytic Insights, field quality data from all available sources (warranty, customer service, product, etc.) is run through prebuilt, analytical models. Though hundreds of thousands of combinations are analyzed, only the few with statistically significant changes become alerts. This reliable, automated process helps problem solvers focus on emerging issues before they escalate.

Each alert is a specific combination of products and events. It also includes scores for prioritization and relevant dates to describe the scope of the alert. Customers receive a link to a comprehensive HTML-based report showing specific details about the alert in graphical and tabular formats. The assessment includes a comprehensive initial run, as well as 11 subsequent monthly results packages.



SAS Results: Analytic Insights offers a social network analysis package that can help you identify customer groups and understand how individuals interact with each other.

Benefits:

- Ship fewer products with quality issues.
- Reduce warranty costs (typical savings of 10 to 20 percent).
- Improve quality and reliability.
- Improve customer satisfaction and retention.
- Protect brand reputation.

Deliverables

With this service, the deliverables will vary depending on the requirements, but can include:

- Presentation of results, including recommendations and insights from SAS experts.
- A review and discussion of the results based on a defined business problem/question.
- Documented summary and agreed-upon output (e.g., data set, presentation, report, etc.).

Pricing and Deployment

SAS Results: Analytic Insights is priced as either an annual, quarterly or monthly fee, calculated according to the breadth of service you require. There's no need to account for technical infrastructure costs or worry about test, development or backup environments. The price of these services is dependent on four factors:

- The volume, variety, format and quality of the data that is required to perform the analysis.
- The complexity of the business problem being solved, including the type of analysis and algorithms that are required to solve the problem.

- The format of the deliverables that will be passed back to you. This can include reports, analytical models, model score code and model documentation.
- The frequency of results delivery. Options vary from a single piece of analysis to daily, weekly or monthly refreshes.

The SAS® Difference

For rapid, cost-effective analytical results, you can trust SAS. Our team of experts is available to help you solve these use cases and more.

SAS enables organizations of any size to access and benefit from the world's most powerful analytics platform, coupled with expertise that is unavailable through any other channel.

Our flexible cost model not only provides the ability to apply SAS software to your business problem, but also access SAS Analytics experts and their cumulative experience on demand.

SAS provides better outcomes through our:

- Ability to handle large volumes of data to get the broadest view.
- Broad range of algorithms to fine-tune model performance.
- Flexibility to meet your current needs and scale as needed.
- Team of highly qualified analytics experts with experience and expertise across a number of industries.

SAS® Results as a Service

All organizations face challenges and are presented with opportunities. This requires answers to critical questions. SAS Results allows your organization to meet these challenges and take advantage of the right opportunities by making the best possible decisions from your wealth of data.

We combine the expertise of SAS services with our award-winning software to help you develop more powerful analytical insights. There is no software license or infrastructure to buy. You provide the data and business problem; SAS delivers the results.

- **Obtain expert help.** We go beyond the technology and provide access to our skilled and industry-specific experts, who know how to get the most from SAS Analytics products for your specific business challenges.
- **Quickly implement key projects.** Blending IT with domain expertise, we deliver the answers you need to focus on your priorities for rapid ROI.
- **Deployment options.** SAS Results provides multiple delivery alternatives through cloud-based or on-premises configurations via SAS Remote Managed Software and Services.
- **Transfer knowledge in-house.** As your business needs evolve, SAS can provide customized support for the implementation.

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

