



SAS® Rapid Predictive Modeler

Generate predictive models quickly and easily,
and apply results to improve decision making

Overview

Waiting for answers is frustrating for all business analysts and decision makers. So is the inability to find answers for themselves in a self-sufficient and automated manner.

SAS Rapid Predictive Modeler, a component of SAS® Enterprise Miner™ 6.2, empowers business analysts and subject-matter experts with easy-to-use capabilities for quickly generating their own predictive models based on their specific needs and scenarios. This enables a wide range of individuals to use and benefit from predictive models without having to always rely on a potentially limited pool of advanced analytic resources.

SAS Rapid Predictive Modeler automatically guides users through a behind-the-scenes workflow of data preparation and data mining tasks for generating reliable predictive models. Business users can generate predictive models based on their requirements, derive on-demand insights and act on them to solve business problems quickly and effectively.

SAS Rapid Predictive Modeler runs from SAS® Enterprise Guide® as well as from Microsoft Excel surfaced via the SAS Add-In for Microsoft Office. Analytic professionals can further improve and customize models developed by business users by using SAS Enterprise Miner.



Challenges

- Unable to solve business problems in a timely and credible manner. Inability to attract, grow and retain your best customers before the competition does.
- Need to generate numerous models to support a variety of business issues in a short time frame, such as predicting customer needs, behaviors, preferences, interactions and buying propensity across business units, products and services.
- Lack of high-quality analytical results to take appropriate actions, which affects your business performance.
- Current predictive modeling tools are not suited for business users. Users must rely on statisticians and modelers who are in short supply and/or already have high workloads.
- Traditional reporting tools, including Microsoft Excel, are needed for monitoring business conditions, but they cannot provide predictive insights to influence or change decisions that drive your business.



The SAS® Solution

SAS Rapid Predictive Modeler provides a quick and easy way to generate predictive models and results to solve specific problems. It analyzes data to automatically transform the data, selects variables, selects the best model from a variety of algorithms and delivers the results in easy-to-understand charts. SAS Rapid Predictive Modeler addresses a wide range of pressing business challenges, including customer analytics-oriented issues such as customer segmentation, up-selling and cross-selling, campaign management, customer acquisition and customer churn.

With SAS Rapid Predictive Modeler, business analysts and subject-matter experts can rapidly explore and analyze their data using either the familiar, visual interfaces available in Microsoft Excel or the guided analysis capabilities of SAS Enterprise Guide.

- Allows business users to generate multiple predictive models quickly without relying on a small pool of overstretched analytic professionals.
- Eases the process of creating efficient, reliable and robust data mining models with prebuilt modeling templates.
- Produces easy-to-interpret reports and charts on model performance.
- Allows analytic professionals to further improve or customize models with SAS Enterprise Miner.

Why SAS?

SAS sets a new standard for bringing the power of predictive analytics to business users so they can act quickly with confidence.

- SAS Rapid Predictive Modeler offers a guided, user-friendly interface for business users to go through predictive modeling tasks in an environment they are familiar with, and enables them to derive analytic results that provide answers to specific business problems.
- Models and results are generated using the powerful functions of the industry's leading data mining solution – SAS Enterprise Miner. This enhances the accuracy of predictions and improves the quality of your decisions.
- Business analysts and subject-matter experts without advanced statistical knowledge can more easily collaborate with data mining specialists, modelers and statisticians to improve business outcomes.
- Integrating predictive analytic capabilities earlier in the decision-making cycle helps you make better decisions.

Benefits

Faster analysis and accelerated time to value

- Provides business users with an easy-to-use tool for generating predictive models so they can add immediate value to their organization without always relying on statistical and data mining experts.
- Enables business users without advanced statistical expertise to use predictive analytics to meet their business objectives.
- Guides users through the process of generating predictive models in a fraction of the time it would take to build them manually.

Better, smarter decisions

- Solves a variety of business issues, including customer segmentation, up-selling and cross-selling, campaign management, customer acquisition and churn. Understanding your customers enables you to make smarter decisions.
- Generates analytic models and results with minimal user input. It eliminates complexities and relies on behind-the-scenes automated data mining workflows to quickly produce the best possible model.

- Statisticians, modelers and data mining specialists can use SAS Enterprise Miner to further refine and customize the models to achieve better results.
- Deploys analytical results to business users and decision makers, as well as to operational systems, to help influence the best actions or outcomes for your organization.

Easy-to-understand charts and results

- Offers an interactive interface that delivers results in charts and graphs to help you quickly solve specific problems.
- Uses existing investments and quickly integrates analytic results to improve day-to-day decision making and overall performance.

Enhanced productivity for analytical professionals

- Offloads some of the simple, day-to-day model-building tasks from data mining specialists and statistical modelers so they can focus on more complex issues.
- Lets data mining specialists and statisticians generate quick, baseline models when they are short on time and resources.

Capabilities

- Choose from basic, intermediate or advanced prebuilt models that use a broad range of classical and modern modeling techniques.
- Automatically treat the data to handle outliers, missing values, rare target events, skewed data, variable selection and model selection.
- Present results in business terms that are easy to understand, including scorecards, lift charts and ranking of key variables. Business users can interact and analyze their data quickly and flexibly.
- Improve and customize models generated through SAS Rapid Predictive Modeler using SAS Enterprise Miner.
- Register models in SAS metadata for direct use in several SAS products to automate the execution of score code and deployment to other systems and solutions. For example, registering models with SAS Model Manager will help streamline validation, deployment and monitoring, as well as integration with SAS Scoring Accelerator to enable in-database scoring.
- Requires SAS® Enterprise Miner™.

The SAS® Difference

SAS Rapid Predictive Modeler sets a new standard in bringing the power of predictive analytics to the business users in order to let them act with confidence and make better decisions. Business users can add value to their domain knowledge on customers, partners and business processes with the means to measure, analyze and act quickly and easily.

- Includes the unmatched and award-winning SAS data mining technologies.
- Increases the productivity of business analysts, subject-matter experts and analytic professionals.
- Fosters collaboration among analytic professionals and business users to further refine and customize analytic models.
- Enables better, higher-volume decisions by integrating predictive analytics earlier in the decision-making cycle.
- Is integrated with the SAS Business Analytics Framework to automate model scoring and deployment into other operational systems.

About SAS

SAS is the leader in business analytics software and services, and the largest independent vendor in the business intelligence market. Through innovative solutions delivered within an integrated framework, SAS helps customers at more than 45,000 sites improve performance and deliver value by making better decisions faster. Since 1976 SAS has been giving customers around the world THE POWER TO KNOW®.

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The screenshot displays the SAS Rapid Predictive Modeler interface within a Microsoft Excel environment. The background shows a data table with the following columns: target_churn, current_billamount, Avg_Calls, Avg_Calls_Weekdays, Percent_Increase_MOM, and Account_ID. The data rows show values for these variables across multiple accounts.

The foreground dialog box, titled "Rapid Predictive Model for: SASDATA.CHURN_RPM", is configured with the following settings:

- Data:** Data source: SASApp:SASDATA.CHURN_RPM; Task filter: None.
- Input Variables:** A list of variables including current_billamount, Avg_Calls, Avg_Calls_Weekdays, Percent_Increase_MOM, Account_Age, acct_site_type, Complaint_Code, Current_TechSupComplaints, Current_Days_OpenWorkOrders, Equipment_Age, Condition_of_Customer_Handset, Avg_Hours_WorkOrdersOpenred, and Avg_Days_Delinquent.
- Modeling Roles:** target_churn is assigned as the Dependent Variable (Limit: 1), and Frequency Count (Limit: 1) is assigned as the Frequency Count (Limit: 1). The variable ID is marked as Excluded.

Automatically generate predictive models for a variety of business problems using the SAS Rapid Predictive Modeler task in SAS Enterprise Guide or the SAS Add-In for Microsoft Office (Microsoft Excel only).