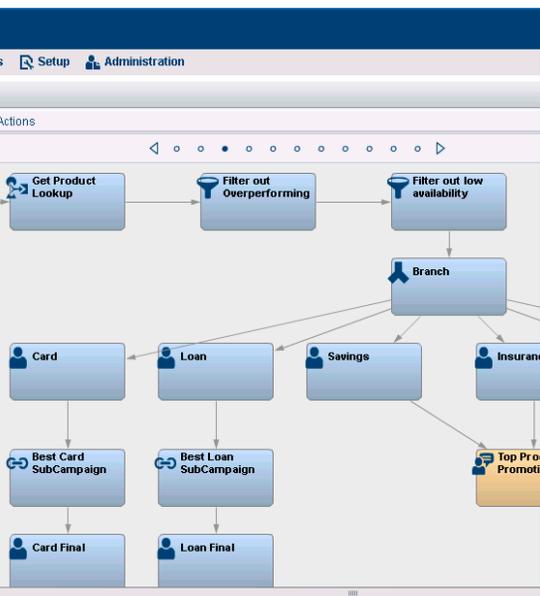


SAS® Real-Time Decision Manager

Make context-based marketing decisions during your real-time customer interactions



What does SAS® Real-Time Decision Manager do?

SAS Real-Time Decision Manager combines SAS Analytics with business logic and contact strategies to deliver enhanced real-time recommendations and decisions to interactive customer channels, such as websites, call centers, point of sale (POS) locations and automated teller machines (ATMs).

Why is SAS® Real-Time Decision Manager important?

SAS Real-Time Decision Manager helps you make smarter decisions by automating and applying analytics to the decision process during real-time customer interactions. By successfully meeting each customer's specific needs at the right time, the right place and in the right context, your business can become more profitable.

For whom is SAS® Real-Time Decision Manager designed?

SAS Real-Time Decision Manager provides distinct capabilities for marketers who define communication strategies, executives who need reports on marketing effectiveness, business analysts who model and predict customer behavior, and campaign managers who create target customer segments.

Overview

As competition grows, organizations must shift their focus from product differentiation to improving the customer experience to create a unique, sustained competitive advantage and to allow you to rapidly respond to changing market dynamics. Innovative, interactive marketing tactics, such as real-time decision making, can prompt significant improvements in sales and retention, revenue and profitability, and customer experiences.

In the past, implementing real-time decision making was difficult, resource-intensive and time consuming. Business users depended on their IT staff. Repeated miscommunications, compounded by persistent changes in market conditions and customer needs, often resulted in missed opportunities and unhappy customers. A proliferation of channels has magnified these problems by requiring additional coordination of strategy and timing.

SAS Real-Time Decision Manager has transformed all that, empowering organizations to keep pace with market and customer demands without straining IT resources. Combining SAS Analytics with business logic and contact strategies, the solution delivers intelligent, real-time recommendations to interactive channels - websites, call centers, POS, ATM locations, etc. The software can recommend next best actions and make analytically based decisions about credit authorizations, fraud analysis, complaint handling and more, allowing you to meet each customer's needs at the right time, the right place and in the right context.

Key Benefits

- **Make the right decisions every time, all the time.** Decision logic alone isn't enough. Only SAS advanced analytics can expose the much deeper insights required to generate the right decisions. As a result, you can deliver relevant, interactive offers in real time - and in

high-volume environments - based on dependable and automated analytical techniques, not business presumptions.

- **Realize customer needs - with the right offer, at the right time, in the right channel.** Make "next best action" an integral part of your marketing strategy. Granular differentiation is enabled through detailed segmentation, determination of offer eligibility and prioritization - all using analytical insight, which forms the basis for delivering a wide variety of customer propositions.
- **Better allocate valuable IT resources.** Business users can construct the automated decision process - even incorporating SAS analytical models - without IT assistance. Our interface lets you intuitively design decision processes. A set of reusable, out-of-the-box tasks, guide you every step of the way. And you still have the option to augment with custom tasks created from SAS code. It's your decision.

- **Handle high-volume interactions with less effort.** The solution's multitier architecture includes server clustering capabilities that support high-volume, 24/7 businesses, so you can make the best customer decisions exactly when you need to, regardless of transaction volume.
- **Automated self-learning analytical process.** Marketing campaigns have become more complex over time. Marketers are demanding simpler, but

powerful, options that yield successful results. One of these options is the ability to use an automated process to generate and update models that determine the customer's propensity to accept the offers you present. Whether the models are developed by analytical experts or by an automated process, you will always have access to a wide range of options for how to use SAS Analytics as part of customer decisions.

Product Overview

SAS Real-Time Decision Manager automates and enhances the decision-making process for high-volume, customer-facing systems and helps organizations execute focused, consistent strategies across channels.

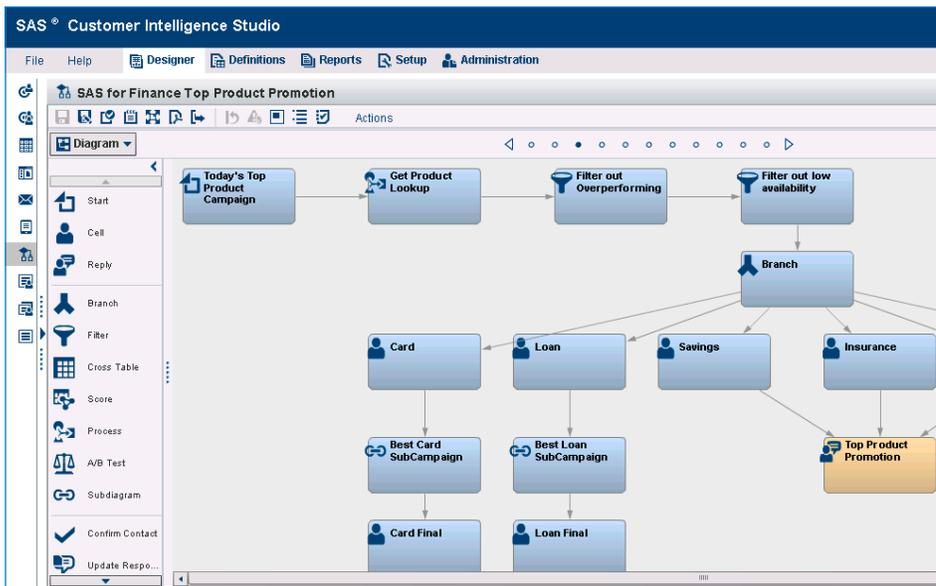
Business users can construct decision processes in an interactive, visual environment. As they build decision processes that incorporate various data sources, they can apply advanced analytic techniques and business logic. As a result, customer-facing employees can quickly make decisions that enrich the customer experience and increase profitability.

Real-Time Analytics

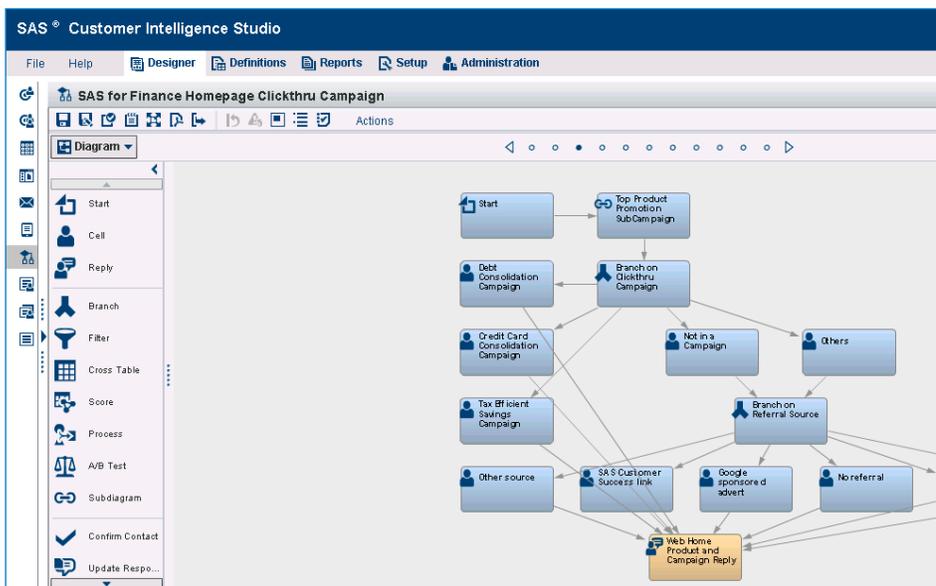
Get immediate insights and recommended best actions exactly when you need them during a customer interaction. Analytics provide insight into a customer's behavior, while decision logic addresses business factors, such as marketing considerations, eligibility rules, contact policy, etc.

Real-time analytics and business rules are applied to historical and real-time data. Next, a wide array of analytic capabilities - including customer lifetime value, propensity, attrition and credit risk modeling - are infused into the decision-making process to ensure relevant, insightful marketing offers in real time.

You can also operationalize decisions by combining your existing customer intelligence with insights gained from past and current customer interactions. The resulting insight, personalization and next best action recommendations can lead to richer, more profitable interactions.



Create inbound-based scenarios to address cross-sell, up-sell, retention and loyalty efforts. You can easily generate and deploy diagrams into production environments.



Funneling customers through the decision diagram based on past or current data allows marketers to deliver a contextually sensitive offer, often to the segment of one.

Rapid Decision Process Construction

To reduce implementation and deployment time, SAS Real-Time Decision Manager provides an intuitive user interface for constructing decision processes. Marketers can create decision workflows using an interactive, visual environment - no complicated coding required. You can even build complex decision diagrams and the decision processes can also interact with data sources, as well as apply various advanced analytic techniques and business logic.

A management console lets you move campaigns and decision diagrams from design to test to production. Also, seamless integration with SAS Model Manager means that SAS algorithms can be rapidly verified and deployed for real-time decisions.

The interactive interface includes drag-and-drop nodes or tasks that can be reused, making construction fast and trouble-free. And because the solution shares a common interface with SAS Marketing Automation, managing inbound and outbound marketing is seamless and requires less effort and cost.

Enterprise Data Throughput

The customer experience can suffer when decisions are not timely or consistent. Designed with high-volume, low-latency, customer-facing environments in mind, SAS Real-Time Decision Manager is built on a multitier architecture with server clustering capabilities to ensure intelligent customer decisions and high-quality customer experiences even in high-volume, 24/7 environments.

Failover and sophisticated error-handling capabilities guarantee that the best decision for the best customer action will be delivered every time - even when there are complications during decision processing.

Key Features

Real-Time Analytics

- Integration with SAS®9 platform for real-time analytics.
- Integration with SAS® Enterprise Guide® for more complex analytical processing.
- Integration with SAS Event Stream Processing for automatic creation of events.
- Analytical model housing and lifecycle management via integration with SAS Model Manager.
- Score nodes for calculating customer value.
- Process nodes for querying business rules and information to determine next best actions.
- Brand nodes guide pathing options while moving through a diagram.

Rapid Decision Process Construction

- Includes reusable, out-of-the-box tasks. Campaign components administration and other tasks by the marketer, without writing code.
- Simple, easy-to-follow workflow checklists.
- Data views available from decision creation to assigning treatments.
- PDF diagram documentation for sharing throughout the organization.
- Reusability of nodes, calculated variables, test cases and subdiagrams from other decision campaigns.

Enterprise Data Throughput

- Ability to deliver more than 5,000 real-time transactions per second.
- Ability to achieve response times of 10 milliseconds per transaction.
- SAS integration utilities allow for simple integration with a variety of third-party applications at the data level.

Campaign Testing

- Out-of-the-box A/B test nodes.
- Campaign analysis capabilities, including more campaign simulation options.
- Ability to test not only entire decision campaigns for their effectiveness, but sub-diagrams and certain decision paths as well.
- Track and view lineage of campaign components to conduct impact analysis of changes.
- More detailed response history, which translates to more information about your customers.

Automated Self-Learning Analytical Process

- Automated, closed-loop process for creating and updating models for customers responding to offers.
- Each customer interaction can contribute data for the model development process.
- The modeling process design is robust against observed response rate, missing values, and can produce predictions even in absence of training data or predictors.
- New models are automatically deployed to the campaign in the run-time environments.

TO LEARN MORE »

To learn more about SAS Real-Time Decision Manager, download white papers, view screenshots and see other related material, please visit sas.com/realtimedecision.

For information on configurations and system requirements, please contact your local SAS sales representative: sas.com/offices.

Key Features (continued)

Connectivity

- Uses a standards-based, service-oriented architecture to deploy SAS Analytics into high-volume, real-time computing environments.
- Accesses all types of data - including a customer's historical information, market factors data and in-session information from real-time interactions.
- Collects contact and response history and shares it with SAS Marketing Automation, so both solutions can access results of both outbound and inbound customer interactions.
- Supports the SAS Customer Intelligence common data model and reporting infrastructure, enabling detailed reports with business intelligence tools.

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

