



SAS® SOLUTIONS FOR THE GROCERY INDUSTRY

Stay several steps ahead of consumer demand with SAS®



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Executive summary

Retailers in all segments are facing more challenges than ever before; primarily, the need for greater customer-centricity in their businesses, changing customer demographics, rising expectations, the globalization of supply chains, extremely efficient mega-merchants, and an increasing level of uncertainty as to what the future holds in a hypercompetitive and evolving marketplace.

For grocery retailers, the mandate is clear: Stay several steps ahead of customers' demands in order to compete in today's consumer-centric market. The notion that grocers are challenged to anticipate and shape future demand to satisfy each customer's unique needs is critical, because the entry of large general merchandise chains with hyperefficient supply chains into grocery during the past 10 years means that it is no longer possible to compete on price alone.

The ultimate goal is to tailor the entire shopping experience and create an emotional bond with valuable customer segments that look for more than just "the lowest price." In effect, this means turning today's multichannel retail enterprise – in a consumer's eyes – from "the store" to "my store." Hunches and instinct are giving way to data driven, predictive analytic business solutions to enable confident, fact-based decisions at the intersection of customer demand anticipation, product supply and competitive pricing.

Unfortunately, just "knowing the customer" is no longer an option in today's hypercompetitive world. Rather, grocers must take what they know about the customer and apply business applications with predictive analytics and optimization capabilities to inform the entire shopping and buying experience. To become a "my store," grocers need to give customers what they want to buy, how they want to buy it, in a way that closely aligns with their unique preferences and behavior patterns.

Introduction

While all of the business issues facing grocers today are important, the challenges are not new. Rather, the current market pressures for grocery retailers bring the business issues into critical focus for those that are going to survive and thrive. Initiatives such as EDI ordering systems, first generation customer loyalty programs, just-in-time supply chains, store-level redesigns and new product offerings have helped, but have not been able to drive business performance improvements to the levels needed for sustainable success in today's environment.

As the demand for analytically based business applications grows in response to the competitive need to differentiate, technologies have been developed to specifically help grocery retailers better match supply – offered at the right price – with customer demand and behavior on a consistent and scalable basis. These technologies make it possible to harvest information from a variety of sources – customers, stores, suppliers, manufacturers – and use it to accurately forecast which customers will buy what products, when and how they will buy them, and what the optimal everyday and promotion price should be to drive profitability. They even automate key customer relationship processes to foster efficient development of a more personal relationship with each consumer.

There is no recipe or one-size-fits-all approach to leveraging powerful software applications to drive business value. The journey to compete and win in today's marketplace begins with the understanding of the power of an integrated technology approach, the definition of what is possible within your organization, and the visionary commitment to achieve a solid return on the investment and fuel growth.

SAS® for the Grocery Industry

SAS is the world leader in delivering software solutions that apply advanced analytics to address comprehensive business problems. For over 30 years SAS has helped customers in the retail arena discover the power in the information they collect and use it to find new levels of efficiency, customer knowledge and financial success. SAS does this by incorporating an unmatched breadth of capabilities with world-class industry knowledge in order to help its customers achieve unmatched results.

Leveraging the power of SAS analytical business applications and proven retail expertise, SAS is uniquely positioned to help grocers understand, predict, and address business challenges that fuel top- and bottom-line growth. Throughout the customer and product life cycle, SAS offerings for grocery enable strategic automation of core processes in a way that will change the game for how grocers apply their accurate understanding of unique customer demand to plan and execute in a highly profitable way in an increasingly competitive environment.

Category Management

The SAS vision for category management is to align best practice business process disciplines with cutting-edge technologies that enable retailers and their suppliers to be more collaborative, strategic and insightful in their planning *and* more aligned, purposeful and precise in their execution of category-enhancing tactics.

Through the application of advanced analytics, SAS has successfully enabled retailers and their suppliers to proactively and expertly understand and predict category performance, foresee and quantify opportunities, and optimize category drivers to deliver the best outcome possible. Advanced analytics enables automation – which makes it possible to deliver optimized category decisions at a detailed level so that each store receives tailored assortments and store-specific pricing that accounts for local customer demand. The result is a competitive advantage that delivers substantial bottom-line profit improvement.

SAS solutions for grocery leverage sophisticated analytics such as data mining, optimization and advanced forecasting, to better anticipate consumer demand and enable delivery of accurate category plans. This can include the latest market trends and tailored local-market assortments that best meet customer preferences and provide full lifecycle price and promotion optimization as well as multitier inventory optimization.

For fast-moving consumer goods including grocery, SAS delivers a full suite of business applications that span the planning life cycle as shown in Figure 1.

Fast-Moving Consumer Goods Planning Life Cycle

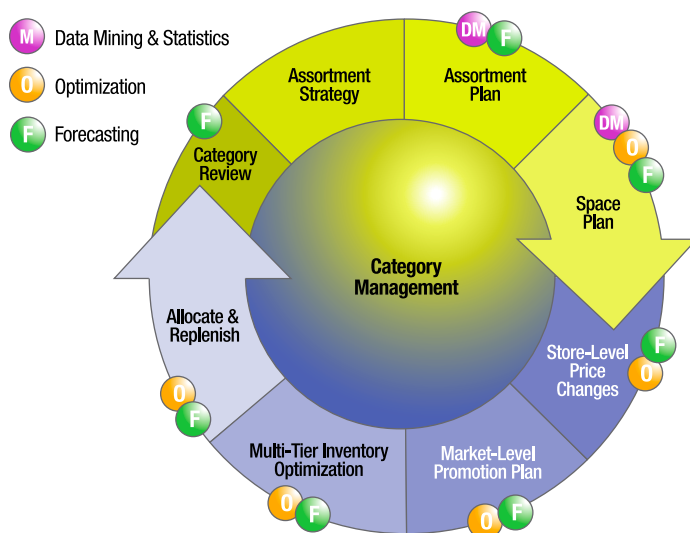


Figure 1. SAS business applications span the planning life cycle.

SAS® Solutions for Grocery: Category Management

SAS® Demand Forecasting for Retail uses a unique high-performance forecasting engine to automatically diagnose, model, execute and reconcile forecasts across multiple merchandise levels and locations. It allows creation of forecast projects and manages forecasts with a built-in forecast repository and versioning system. SAS Demand Forecasting for Retail produces results at any level of the product and location hierarchies down to the SKU/store level.

SAS® Merchandise Assortment Planning for Category Management

supports the ongoing planning process for each product category, including the ongoing management of financial goals to ensure target achievement. Leveraging the proven SAS Merchandise Assortment Planning solution, Category Management supports the key capabilities of category planning, product hierarchy definition, and performance tracking and modification. In addition, SAS Merchandise Assortment Planning supports the creation of a master assortment for the company. Because the information is integrated with intelligent clustering and merchandise performance analysis, it allows retailers to build tailored local market assortments with the ideal breadth and depth of product, based on their customers' real interests, location, demographics and buying trends – not on rough estimations.

SAS® Promotion Optimization lets grocery retailers maximize sales revenue and margins through improved promotion planning powered by advanced demand modeling and optimization. Promotion optimization enables accurate promotion forecasting and examination of post-promotion effectiveness to determine how to improve future activities.

SAS® Regular Price Optimization leverages sophisticated demand forecasts and optimization routines to determine optimal everyday prices for products down to the store/SKU level. Taking into account detailed demand history, key causal factors and business rule constraints, the solution applies advanced analytics to ensure regular prices are aligned with category strategies and business goals such as increasing margin or driving revenue growth. When combined with the power of SAS Promotion Optimization and SAS Markdown Optimization, the solution delivers optimization across the full pricing life cycle.

SAS® Space Planning gives grocery retailers control over the detailed selling space. Tying category planning and assortments to space ensures that companies have the optimal amount of space on the selling floor to display each category, eliminating back-room inventory overstocks that ultimately need to be cleared or transferred. With SAS, space productivity can be measured in any selling channel, (e.g., stores, online or catalog). Functionality spans the entire process starting with the allocation of overall store space to each category through the automated generation of store specific plan-o-grams.

Customer Relationship Management

The SAS vision for customer relationship management (CRM) allows grocers to evolve existing first-generation loyalty programs that deliver standardized offers and messaging into progressively sophisticated programs offering more relevant and personalized communications that begin to foster a more personalized relationship with each customer.

Perhaps no area in the grocery industry is privy to more data, and in more need of data driven insights, than that of the Loyalty and Customer Relationship Marketing functions. SAS offers an end-to-end suite of products bundled as a retailer's answer to achieving true *customer intelligence*. The foundation of SAS Customer Intelligence is based on SAS software's proven ability to span and transform disparate systems such as point of sale, promotions, demographic and payment and online, which are otherwise silos of customer information. This ability to construct a comprehensive view of the customer is fundamental to effective marketing strategy which places understanding of the customer, and not simply the products sold or unsold, at the center of a Loyalty Marketing strategy.

The SAS suite's scalable CRM applications are infused with sophisticated forecasting, data mining and optimization analytics that enable grocers to evolve their loyalty marketing programs to include personalized, and ultimately optimized, communications, as outlined in Figure 2.

Grocery CRM Maturity Spectrum

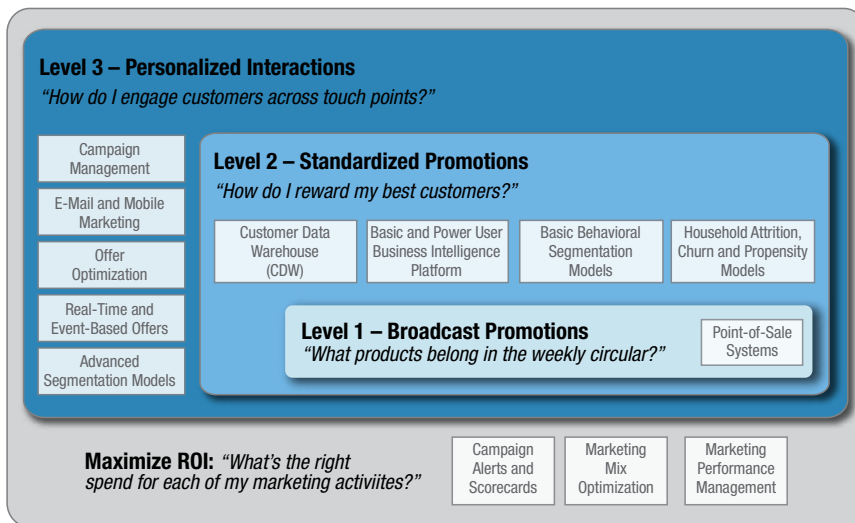


Figure 2: The Grocery CRM Maturity Spectrum with three progressing levels of sophistication all existing in the realm of maximizing ROI.

Levels 1 and 2, Standardized Promotions – At these levels marketing programs emphasize a combination of mass media communications often complimented by loyalty programs that offer uniform discounts, promotions and rewards programs to all customers. Retailers at these levels can achieve significant profitability improvements by optimizing the promotional offer mix as part of an advanced category management process described earlier.

Grocers achieve the second level with a true customer data warehouse that provides a “single version of the truth” for all customer information. This allows more sophisticated customer insight analytics that provide a deep understanding of the buying behaviors of each customer segment. These insights and basic segmentation models are applied to enable a more customer-focused strategy across all marketing vehicles.

Level 3, Personalized Customer Interaction – At this level the grocer has a true multichannel, multiwave direct marketing campaign management center of excellence, resulting in unique offers to unique customers to maximize return on each marketing investment. Within this level communications vehicles can range from basic direct mail to a wide array of touch points that includes e-mail, mobile devices, in-store kiosks, point-of-sale terminals and call centers.

Achieving personalized customer interaction in a cost-effective manner requires scalable solutions that automate the direct marketing process through the use of the latest analytics. Analytic direct marketing solutions can detect key patterns in each customer’s behavior to automate offer selection, and even provide complex real-time offer decisioning on offers for customers engaging with a grocer using the latest Web-based devices.

Maximize Return on Investment – Continuous improvement of marketing performance is realized by organizations that measure the impacts and returns from all advertising and promotion activities. Retailers who truly achieve this level of sophistication track and manage customer segment profitability just as closely as they do product category profitability. Additionally, comprehensive measurement approaches allow for more dynamic execution of sophisticated longitudinal contact strategies that span multiple customer touch points.

SAS® Solutions for Grocery: Customer Relationship Management

SAS® Customer Insight for Retail provides strategic segmentation and behavior predictions based on customers' demographic, psychographic, transactional and attitudinal data. Additionally, the solution can segment and profile stores based on transaction history and trade-area demographics to support local market assortment optimization.

SAS® for Customer Experience Analytics allows companies to track and see every aspect of an individual's online interaction, including decisions made and actions abandoned, timed to the millisecond.

SAS® Campaign Management for Retail makes it easy for retailers to automate marketing processes, increase productivity and execute campaigns on time and on budget. It features an automated, repeatable and easy-to-use environment capable of quickly executing a wide range of campaigns – from simple to very complex; from strategic, planned market programs to opportunistic, near-real-time communications aimed at a precise audience.

SAS® Marketing Automation helps improve response rates and revenues from marketing efforts by giving companies the ability to easily manage sophisticated, timely and personalized customer communication strategies. Built specifically to meet the needs of key members of the marketing process, SAS Marketing Automation provides comprehensive data management, campaign management and advanced customer analytics in one integrated, easy-to-use solution.

SAS® Marketing Optimization helps companies reach the next level of effectiveness and profitability in campaign management by evaluating multiple campaigns simultaneously to determine which products should be marketed to individual customers for maximum return.

SAS® Real-Time Decision Manager combines SAS Analytics with business logic and contact strategies to deliver real-time decisions and recommendations to interactive customer channels such as the Web, the call center, point-of-sale and in-store kiosks.

SAS® Veridigm MRM® (Marketing Resource Management) helps retailers track and improve the effectiveness of marketing investments on a continual basis. This offering includes marketing analysis, simulation and optimization – as well as expert professional services – which transform marketing data into intelligence, action and a higher return on marketing investment.

SAS® Solutions for Grocery: Data Integration

SAS® Data Integration provides a single environment that seamlessly integrates data quality within the data integration process, taking users from profiling and rules creation through execution and monitoring of results.

About SAS® Retail: Comprehensive Retail Intelligence

SAS offers a comprehensive vision for complete retail intelligence. Retailers can employ a wide range of powerful SAS solutions, all built upon a common retail business intelligence platform to allow for rapid integration and lower total cost of ownership.

The SAS solutions include nearly three decades of SAS retail analytics experience and merchandising best practices. No other vendor offers such a comprehensive, integrated set of solutions for retailers:

- **SAS® Customer Intelligence.** Identify, acquire, activate, serve and retain profitable customers.
- **SAS® Merchandise Intelligence.** Drive revenue, protect margins and earn customer loyalty with optimized merchandise plans, assortments, demand forecasts, pricing, promotions, space plans, allocations and optimized inventory levels.
- **SAS® Operational Intelligence.** Leverage organizational assets to serve customers and trade with vendors efficiently and profitably.
- **SAS® for Performance Management.** Analyze, forecast and maximize profits across the entire value chain and monitor performance toward common goals.

Today, SAS serves more than 80 percent of FORTUNE Global 500® general merchandisers and specialty retailers. SAS is also an associate member of the National Retail Federation.

Learn more at: www.sas.com/retail/.

About SAS

SAS is the leader in business intelligence and analytical software and services. Customers at 44,000 sites use SAS software to improve performance through insight from data, resulting in faster, more accurate business decisions; more profitable relationships with customers and suppliers; compliance with governmental regulations; research breakthroughs; and better products and processes. Only SAS offers leading data integration, storage, analytics and business intelligence applications within a comprehensive enterprise intelligence platform. Since 1976, SAS has been giving customers around the world THE POWER TO KNOW®



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