Forecasting A Stronger Future For Retail Businesses

5 Ways To Use Analytics To Boost Customer Engagement
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Introduction

To win in today’s increasingly competitive retail marketplace, merchants must be able to respond to pricing, promotional and merchandising changes in near real time. Digitally savvy and financially cautious consumers know what’s available at the competition’s stores — and they are not willing to forfeit a better deal on their desired products.

This is especially important in today’s uncertain economy, as outlined by Deloitte’s Pat Conroy in the report titled 2014 Outlook on Consumer Products: “Economic uncertainty and the severity of the last recession have left U.S. consumers cautious, frugal, and resourceful. Many consumers are embracing savings tactics like retailer loyalty cards, store brands, shopping lists, coupons, and delaying purchases for sales. Frugal behaviors are likely to endure in the coming year, as 94% of consumers plan to keep their spending on food, beverage, and household goods at its current level even if the economy improves; 79% of consumers still believe the U.S. economy is in a recession.”

With the best forecasting and planning solutions in place, retailers can determine the right time to change prices, update promotions and improve inventory capabilities. Not only will shoppers be happier and more loyal, but operational systems will run more effectively.

Forecasting solutions — the center of promotion, planning and pricing — can deliver impressive results when implemented effectively and in a timely manner, according to Forrester Research in the February 2014 report titled Prioritize Retail Technology Management Investments To Stay Competitive: “If you haven’t included markdown, promotion, or initial pricing optimization in your immediate plans, then you risk missing significant opportunities. Of the respondents to our Q3 2013 custom survey of international retail executives, 19 out of 32 expected payback on promotional price planning or optimization in less than three months, and 14 expected payback on initial pricing in the same short period. Markdown optimization is a mature technology, but 26 respondents still expected markdown to yield ROI over a full 12-month cycle of buying and selling out seasonal merchandise.”

A number of forward-thinking retailers are seeing impressive results from forecasting solutions, including Staples, Chico’s, Matas and Tesco, highlighted in this report.

“If you haven’t included markdown, promotion, or initial pricing optimization in your immediate plans, then you risk missing significant opportunities.”

-Forrester Research

94% of consumers plan to keep their spending on food, beverage and household goods at its current level
Sensing And Shaping Demand

Effective forecasting solutions can sense demand changes and shape new capabilities. By analyzing and measuring demand signals, merchants will be able to try out different pricing, promotional and merchandising scenarios to most significantly impact future demand. A price adjustment here, an advertising change there, or a new, targeted sales promotion can make a huge difference when implemented correctly.

These types of small but relevant changes can help retailers move closer to the ultimate omnichannel goal. The key is starting to use advanced analytics to improve performance first with the low-hanging fruit, to deliver actionable results. With quick wins in hand, merchants can move forward with other game-changing programs.

“The ability to use advanced analytics to optimize performance across all departments is a tremendous opportunity to increase profitability, efficiency and make better business decisions,” said Peter Zelter, Sales Executive specializing in customer intelligence at SAS.
Moving From Supply-Centric To Demand-Driven Retail

In retail days past, consumer packaged goods (CPG) suppliers were more focused on shipments and replenishments than demand. “They loaded up channels to make annual sales and profit targets,” said Charlie Chase, Chief Industry Consultant and Subject Matter Expert for the manufacturing and supply chain global practice at SAS. As a result, retailers had to find creative ways to sell over-ordered products using trade promotion activity. In trying to gain additional revenue through trade incentives, the overstocked products would be considered loss leaders. Pools of inventory would be diverted from one retailer to another, and the products would eventually be sold at dramatically reduced margins.

Because demand was relatively stable at the time, that system worked well for a while. But this is no longer the case in today’s marketplace. Today we need to step away from traditional supply-centric approaches that rely on supply replenishment and move to demand-driven processes that uses predictive analytics to sense demand signals and shape future demand with a focus on the consumer, according to Chase, author of two books: Demand-Driven Forecasting and Bricks Matter (the latter co-authored with Lora Cecere).

Now available to all retailers, advanced optimization solutions not only sense and shape demand, but can also sense and shape supply based on customer service levels, lead time, supplier costs and other factors. Retailers using these technology solutions to optimize inventory across stores and the supply chain are seeing as much as 15-30% cost reductions while still meeting demand at 90-99% customer service levels.

“The ability to use advanced analytics to optimize performance across all departments is a tremendous opportunity to increase profitability, efficiency and make better business decisions.”

-Peter Zelter, SAS
1. Improving Price To Boost The Bottom Line

Pricing strategies are more important than ever. As shoppers have access to real-time information, retailers must be prepared to make quick price-change decisions. It’s no longer OK to determine initial and markdown pricing at the product release date, then wait and see what happens. Today, merchants must decide whether or not to engage in price matching and other pricing tactics, while monitoring the competition on a day-by-day (and sometimes minute-by-minute) basis.

“Price matching is a crapshoot for both the consumer and retailer,” noted Greg Girard, Program Director, Merchandise Strategies at IDC Retail Insights. “You can come in with a printout or tell an associate you saw a certain price, but when they look it up it may not be there anymore. Price is a moving target and it breeds fear, uncertainty and doubt.”

To remain competitive, retailers are turning to price forecasting and optimization to stay on top of trends and the competition. Pricing solutions also can help retailers and their CPG partners make more educated decisions based on calendar events, products listed in store circulars, media campaigns and seasonal activities, then feed that information into the overall operation and replenishment plan.

The key is tying together data from different aspects of the business to deliver more calculated pricing foresight, noted Jim Wentzel, Manager, Pre-Sales High Performance Analytics Team at SAS: “Because we have so much computing power today, pricing teams are able to incorporate the analytics from promotion optimization with demand forecasting in order to make better decisions.”

“Price is a moving target and it breeds fear, uncertainty and doubt.”

-Greg Girard, IDC
In one example, a national sporting goods retailer was seeking to improve pricing at the category and style levels. In the past, merchandisers would guess on pricing based on the past season and would miss the mark on the category level, which would impact results on the style level. With a new forecasting solution from SAS, the company was able to reduce the error rate on the category level from 200% to 40%.

In another example, a regional home improvement retailer needed a solution to help execute on store-level pricing data. With a new pricing solution from SAS, the merchant was able to set better prices and capture margins within specifically designated geographic clusters.

Apparel retailer Chico’s also is benefiting from advanced analytics and pricing. With a new strategy executive on board, Chico’s was able to tap analytics for success.

“He was very comfortable with analytics and saw the power of it, so we worked very closely with him to find new sources of internal and external data that we hadn’t previously used to price product,” explained Barb Buettin, Director, Customer Relationship Management and Enterprise Information Management at Chico’s FAS Inc. “We worked together to figure out how to tie all of these disparate data sources together — coupled with the necessary historical trending — to see how we should be pricing....This gave us an opportunity to show how analytics can take the organization many steps beyond where we had been previously.”
2. Updating Promotions In Response To Customer Demand

Retailers know that their marketing and promotional strategies will benefit greatly from the use of business intelligence (BI) and analytics. In a January 2014 Retail Systems Research (RSR) study titled *Retail Analytics Moves To The Frontline*, retailers chose Marketing (55%) as the number-one internal organization that would gain the most from these tools. Additionally, 51% of what the study calls “Retail Winners” selected improved marketing effectiveness as a top operational opportunity from the use of BI and analytics (vs. 37% for “Laggards”).

Identifying the need is the first step. Then, organizations with all available customer data in hand are ready to move to the next step: implementing the solutions that will elicit positive change. Today’s marketing optimization solutions can help retailers identify the right campaigns for each shopper and the most effective channels for delivery of promotional offers.

To prove the business case for the move to marketing optimization, merchants can start with quick wins, which could consist of optimizing inbound and outbound campaigns. Currently, many retailers are blanketing their customer database with every promotional offer, which means many customers are receiving offers they are not interested in, or could even find offensive. Optimization solutions help target the delivery of the right messages to the right audience.

Optimization solutions also can help personalize promotions, so you’re not offering a coupon to a shopper who is already planning to buy the product at full price. Then store associates can participate in event stream processing (ESP): uncovering promotional opportunities that can be personalized to each shopper based on his or her overall involvement with the brand.

With event stream monitoring in place, a retailer can deliver offers to customers in-store based on previous purchase history. ESP system monitors detect that a shopper has entered the store, then accesses that shopper’s personal purchase history. Depending upon retailer preferences, the system can send the shopper an SMS message or email containing a personalized offer; or the system can alert an associate to specific offers that will pique the interest of a particular shopper, such as a 35-year-old woman who previously purchased black pants and earrings.

55% of retailers chose marketing as the number-one internal organization that would benefit the most from BI and analytics.

-Retail Systems Research
3. Delivering More Efficient Inventory Turn

Shoppers these days aren’t even walking through the door of a store to find out if a product is in stock. They are searching online first, and if they see that the item they’re searching for is out of stock, most (58%) are unlikely to visit that retail store, according to a Forrester Research report titled Customer Desires Vs. Retailer Capabilities: Minding The Omni-Channel Commerce Gap.

Once in the store, consumers have high expectations. They want sales associates to be experts on the products in-store (68%) and online (45%), according to the report.

To deliver on these expectations, retailers must have a clear view of inventory across all channels and the ability to fulfill orders on the spot. A number of different technology solutions can play a role in reaching these goals. A Demand Signal Repository (DSR), for example, can provide access to all the data needed to fill store shelves and shoppers’ carts, including POS, supplier, shipment, replenishment, pricing as well as distribution.

Additionally, collaboration planning tools can facilitate real-time communication between retailers and suppliers, leaving no lag in ordering and re-ordering. And Integrated Business Planning can help synchronize and balance demand with supply — and help shape future demand.

“It’s about becoming more nimble,” noted Bob Davis, Principal Product Manager in the Supply Chain Management Solutions group at SAS.

“Today’s inventory optimization strategies must work off one signal of demand: the customer. Then it synchronizes up through the chain, so everybody is working on that signal. Inventory optimization allows a retailer and vendor to look at the single signal of demand.” He added that with this kind of insight, retailers and their supplier partners can reduce the amount of stock in the DCs to include just the correct inventory.

58% of shoppers will probably not visit a store again if the item they’re searching for is out of stock.

-Forrester Research
Tesco, for example, was facing significant inefficiencies in its DCs, which were holding too much stock that wasn’t selling. One of the top three revenue- and profit-producing retailers in the world, Tesco was looking at holding on to hundreds of millions of dollars’ worth of inventory, inhibiting the company’s ability to increase its product range.

To reach its goal of 90% service level, Tesco needed to reduce stock on certain items and open space for faster sellers. Instead of building bigger DCs, the retailer has been able to order the correct quantities of inventory, decrease slow-selling inventory and increase service levels, following the implementation of SAS Forecasting and SAS Inventory Optimization Workbench.

In another example, Matas, a small drug/convenience store chain in Denmark, was looking to automate its replenishment process. With SAS Inventory Optimization Workbench in place, Matas was able to reduce replenishment time by more than 35%.

The retailer also increased ordering accuracy and achieved higher service levels, fewer out-of-stocks, and better fill rates in less time. Inventory turns increased by more than 29%; time managing inventory was cut by an average of 15-30% per store; and overall revenue surged by 13%.

“What ends up happening so often is that inventory optimization is thought of as this great thing that will reduce inventory, but that scares the daylights out of retailers — that means out-of-stocks to them,” explained Davis. “But it ‘right sizes’ the inventory, so you [in fact] have fewer out-of-stocks. Vendors want to see reduction, but retailers want to see strong fill rates with customers and fewer out-of-stocks.”

SAS® Forecasting and SAS® Inventory Optimization Workbench helped Tesco achieve 90% service levels.
The Cross-Channel Fulfillment Challenge

A significant part of the omnichannel imperative is the ability to allow shoppers to buy anywhere/pick up anywhere/deliver anywhere. On the retailer side, that means creating a new fulfillment model that efficiently picks and delivers products from the most convenient source, whether it’s a DC or a nearby store.

Retailers are making progress in their efforts to complete the cross-channel fulfillment challenge, but it is a slow and challenging process. According to RSR in its December 2013 report titled Supply Chain Execution 2014: Making Omni-Channel Profitable, just 60% of retailers have direct-to-consumer fulfillment from the DC; 37% have online visibility into in-store inventory; 36% offer in-store pickup; and 29% provide ship-to-store from the DC.

To get cross-channel fulfillment up and running quickly and efficiently, retailers need to be able to forecast for the new business model — or suffer the consequences. If a consumer orders a laptop online and then jumps in the car to pick it up at the nearest store, that item had better be ready and waiting. If it’s out-of-stock, you’ve likely lost a customer forever.

But all-channel fulfillment cannot occur at the expense of business logistics and financial responsibility. In one example, a high-tech catalog company had committed to three-day shipping to anywhere from one of the three U.S. warehouses. But if an item was out-of-stock in the Los Angeles warehouse, it might get shipped from New York. The costs associated with the quick-ship from across the country added up to long-term losses.

An effective forecasting solution can help bridge that gap and create the necessary rules and efficiencies for a profitable all-channel fulfillment system.

Just 60% of retailers currently have direct-to-consumer fulfillment from the DC.

-Retail Systems Research
4. Boosting Merchandising Capabilities

Getting merchandising right is the difference between being a retail leader and a retail follower. Aberdeen confirmed this scenario in its March 2014 study titled Rethinking Merchandise Optimization In The Connected-Customer Era. According to the study, “Retail Leaders” rack up 96% in-stock percentage and 39% full-priced sales as a percent of overall sales, compared to 67% and 22%, respectively, for “Followers.”

To become a leader, merchants need to address the Big Data challenge, Aberdeen reported: “Without a plan to harness and manage this new data, both structured and unstructured, the company will be hampered by inefficiencies of transaction processing, [inefficient] merchandise placement and gross margin erosion.” The research firm touts analytics as the answer: “…the ability to store and report on results, and analysis to forecast trends by segment and eventually turn Big Data into intelligence by customer channel.”

But the elephant in the room is the connection between merchandising and marketing. “The omnichannel world needs to take into account marrying marketing and merchandising,” said Zelter of SAS. “I think there’s a pretty big debate going on between merchandising and marketing in most organizations. If you look at the Sunday circular and coupon books, for example, those tend to get driven more by merchants than marketing people.

Most marketing people, if forward-looking, might say: ‘Don’t do the Sunday circular, but do digital that is very targeted.’ Circulars get driven by merchandising, but are trying to motivate the customer to purchase. That is the debate: How do we get everyone singing from the same hymn book here so we’re not over-promoting or under-promoting?”

Retail leaders have figured this out. As many as 50% of leaders are integrating promotion data with the merchandise system, compared with 33% of followers, Aberdeen reported.

“Retail Leaders” rack up 96% in-stock percentage compared to 67% for “Followers.”
- Aberdeen
Although most retail organizations say they want to be “customer-centric,” many merchandising decisions are still very product-focused based on negotiations with vendors. But if merchants are willing to make a different type of decision using advanced analytics, “the data can be at their fingertips,” noted Wanda Shive, Retail Solutions Product Manager at SAS. Then, “merchants can see that when they promote Product X over Product Y, the total basket effect is very different.”

Today’s merchandise managers also need to look deeper into the marketplace to identify the direct-to-consumer promotions being offered, in addition to mass promotions. Advanced analytical solutions can determine the effect of one versus the other and help managers make better decisions moving forward.

The bottom line is that forecasting solutions can predict the lift of one merchandising decision over another.

Staples is realizing the benefits of this type of strategy in determining how to merchandise products through various channels. “Staples sells certain products that buyers would be reluctant to buy online, such as chairs,” explained Jim Foreman, Director of Circulation and Analytics at Staples. “Most people want to walk into a store and sit in it, try it out and see how it makes them feel. Ultimately, it’s not a trade-off between the retail stores and online shopping. It’s a matter of finding the best way to leverage both of those valuable channels to work together for the best result.”

Staples is using merchandise forecasting to “find the best way to leverage both of those valuable channels [online and in-store] to work together for the best result,” according to Jim Foreman, Director of Circulation and Analytics.
If the term “cannibalization” conjures a frightening scenario, it should. While retail cannibalization is arguably not as gory as the human variety, it can have a similar effect on a category. “We need to be able to forecast not only the impact of promotion on a single product, but also the impact on the category,” Shive noted. “If I am promoting one brand of cereal this week, how much does that take away from another brand?”

But beyond that single product and its competitors, retailers also must consider if there is a halo on associated products — to both encourage and discourage cross-promotion. If there is a grill promotion going on this week, it might not be necessary to discount charcoal and lighter fluid. Forecasting solutions can calculate the cross-effects of one promotion on many other products and associated categories.

Forecasting solutions can help by incorporating both internal and external data, for more targeted offers and promotions. Once the internal purchase data is in place, the solution can bring in a variety of other data, such as social, weather and regional. Additional data sources strengthen the ability of the forecasting solution to produce effective strategies.

But, Shive warned, get the foundational eggs in the basket first: “We get very excited about new data sources, but often we have so much work to do on the fundamental data. Don’t go after the shiny latest thing until you master the fundamentals first.”

“**We need to be able to forecast not only the impact of promotion on a single product, but also the impact on the category.**”

Wanda Shive, SAS
Conclusion

The retail industry has been disrupted by a number of significant factors including the economy, the digital revolution and new channels. Retailers can fight back by implementing the best technologies that will help forecast demand and determine the best marketing and merchandising strategies moving forward.

Retailers like Tesco, Staples, Matas and Chico’s are realizing the benefits of optimizing business processes using advanced forecasting and analytics.

Many retailers are still struggling with some of the challenges associated with adopting new technology strategies, such as the struggles between marketing and merchandising and the differing priorities between retailers and CPG suppliers. But when they see the results of moving from manual process to automated forecasting, it’s hard to argue the value in pursuing these strategies.

This E-book has presented the five ways to use analytics and forecasting to build a stronger, long-lasting retail future. Retailers can start small and reap a quick ROI from the low-hanging fruit, then move forward with more detailed strategic plans.
About SAS

In retail, where companies can go quickly from rags to riches — or riches to rags — the customer’s perception of, and experience with, your brand is critical not only to staying in business, but growing your business as well. SAS enables retailers and suppliers across all segments — apparel, grocery, specialty, general merchandise, online and hardlines — to uncover in-depth customer insights that you can use to delight customers by engaging them in profitable ways. With high-performance analytics at the core and backed by more than three decades of retail experience, SAS solutions for retail enable you to find new and better ways of doing business. sas.com/retail

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