



TRANSFORM CUSTOMER DATA INTO PROFIT

Discover new sources of value through analytic insight across your marketing, sales and service organizations.



Table of Contents

Empowering marketing, sales and service with analytics 2

How can CRM initiatives live up to this potential?..... 3

Create a unified view of the customer across all touch points. 3

Apply analytics to drive profitable customer relationships..... 5

Translate analytic insight into effective action. 6

Align marketing, sales and service with enterprise-level goals. 7

Summary 8

About SAS 8

Appendix — Analytics-driven customer intelligence in the real world.... 9

About the author**Jeff Levitan, General Manager, SAS Global Customer Intelligence**

Prior to joining SAS, Jeff Levitan was chief operating officer of Veridium, a leading provider of marketing effectiveness software which was acquired by SAS in 2006. Previously, he was vice chairman of the TransNational Group, a multi-million dollar portfolio of marketing-based companies. As an executive officer of Staples Inc., Jeff founded and launched Staples.com, and guided its domestic and international expansion. Before Staples, Jeff was a strategist with the Boston Consulting Group where he specialized in management consulting to large retail and CPG companies. Early in his career, he held a variety of brand management positions at The Gillette Company and The Stride Rite Corporation. Jeff earned his MBA from The Wharton School of Business and holds a BA from Cornell University.

Jeff can be reached at Jeff.Levitan@sas.com.

Customer-first. Customer-focused. Customer-driven. Customer-centric.

Customer-obsessed. The words have been bandied about in the management lexicon in the last few decades as though each new wave of strategists was the first to realize that revenue, ahem... comes from customers.

That fact seems self-evident, but what has been less clear is how to fully capitalize on that resource, how to keep as much of it as possible away from the competition, and why attempts to be “customer-centric” have so often fallen short of expectations—both for customers and for the companies that hope to profit from them.

Enterprises long ago acknowledged the value of customer relationship management (CRM)—of mobilizing resources around customer relationships rather than product groups, and fostering activities aimed at maximizing customer lifetime value. Ditto for enterprise resource planning (ERP) systems, which introduced new efficiencies by streamlining processes across the organization.

In many cases, these operational systems brought value, but they could only do what they were designed to do: reduce costs and increase efficiency. Ultimately, improving operational efficiency is like squeezing an orange. With the first squeeze, you get a significant return on investment. The next time, you get a little less, then less. And when your competitors are doing the same thing, the best you can accomplish is parity. Clearly, enterprisewide operational platforms are a blessing but not by themselves a panacea. Automation is not insight.

Maybe the answer isn’t squeezing a few more drops out of the orange, but questioning whether more orange juice really produces more profit. Maybe those efficiencies are being gained at the expense of enterprise-level goals. Maybe all these optimized processes are delivering a sub-optimal customer experience, because they didn’t adapt to the changing needs of customers.

And boy, are customers changing. When *Time* magazine declared that you and I (and six billion others) are Person of the Year 2006, the magazine acknowledged an irrevocable evolution. The new digital democracy is one where we all expect to star in our own personalized realities. Consumers have been transformed. They’re not just lining up to buy what’s offered; they expect to be valued participants in the process.

Customers blog their grievances, post their reviews, eBay their castoffs, publish their creativity and customize their information streams. The global media machine showcases each as an individual. So, as Customer of the Year 2007, they might fairly ask, “Why can’t your business do as much for me?”

“Why are you urging me again to activate that equity line, when it’s clear I don’t need to borrow right now?” “Why are you sending a promotion for 50,000-mile service, when I just bought the car three months ago?” “When I called about my cell phone problem, didn’t you notice my contract was due to expire?” “Why did you taunt me with offers of a ‘pre-qualified’ loan, only to reject my application later?”

■ Faster + more efficient doesn’t always equal better. Enterprisewide operational systems can automate customer interactions, but they do not provide the insights that are needed to enhance the mutual value of those interactions.

These missteps would lead any customer to believe you don't understand their needs and don't even remember them. We all want to be valued, especially now that we're on the cover of *Time*. We're the stars now. If a company wants our money, we want red-carpet treatment.

Empowering marketing, sales and service with analytics

To meet these challenges, forward-thinking organizations have amplified their “return on automation” by investing in analytical CRM as well. As the name implies, analytical CRM provides the understanding and insight an enterprise requires to confidently make decisions that drive profitability. Consider the possibilities:

In marketing organizations, analytic insights enable a company to:

- More effectively retain profitable customers and attract others like them, by creating timely and tailored marketing programs that reflect each customer's uniqueness and preferences.
- Adjust pricing strategies to counter competition, win sales and maximize profitability.
- Increase sales per customer by predicting which are most likely to buy, based on multiple factors such as life milestones, acquisitions, external events and more.
- Get the most from investments in advertising and other promotions by understanding the media mix that optimizes returns.
- Increase customer satisfaction, loyalty, and referrals by providing consistent customer treatment—a cohesive company image—across all touch points.
- Allocate limited resources—such as budget, staff, IT systems, etc.—for greatest advantage.

In sales organizations, analytics empower sales representatives to:

- Focus their efforts on high-value prospects who are most likely to buy.
- Shorten sales cycles by making more timely and relevant offers, based on analysis of demographic, geographic, attitudinal and behavioral data.
- Uncover new sales opportunities by better anticipating customers' needs.
- Monitor changes in behavior that could trigger specific actions or customer engagements.

In service organizations, analytics make it possible to:

- Proactively monitor, diagnose and predict customer service requirements—instead of waiting for breakages or outages to occur at the customer's site.

- Understand how to transform a customer's grievance into a positive experience—or even an opportunity to delight that customer with appropriate, proactive cross-sell/up-sell offers.
- Quickly detect emerging issues and pinpoint the root causes of product failure, to save valuable weeks in the problem resolution cycle.

How can CRM initiatives live up to this potential?

The benefits of analytics are compelling, but they can be elusive too. Why? Some of the reasons are cultural. Organizational process and personnel issues—such as buy-in, departmental politics, flawed procedures or reward programs—hinder the effectiveness of CRM. From a technology standpoint, however, there are four key factors at play:

- The inability to assemble a 360-degree view of each customer, or for that matter, the business.
- Shallow analytics, or analytics applied only to specific niche functions.
- A gap between analytics and action, i.e., customer intelligence is created but not *used*.
- Misalignment of department-level actions and enterprise-level goals.

The good news is that these limitations are not insurmountable, and they can be resolved with technology that is available today. It doesn't even require an IT overhaul. You can start small, supplementing existing systems, and add capabilities as the business case warrants. Here are the four key capabilities that address these limitations, and enable analytical CRM to deliver the benefits it should.

Create a unified view of the customer across all touch points.

The issue. Traditional information systems that feed into CRM programs usually reflect a process- and product-oriented view of the business, and use a host of independent systems on different platforms, which share information in a limited way.

Integrated sales force automation, contact management, marketing automation and contact center systems provide new levels of productivity and information sharing among front-office departments. These applications may support a shared, consistent view of their departmental activities and customer data across functions, but they still suffer from incompleteness. They don't capture all the ancillary factors—and interdependencies among them—that drive customer understanding and better business decisions.

The solution. To maximize ROI, enterprises need a technology infrastructure that supports a unified view of the customer, spanning all touch points and systems.

Does that mean existing investments in traditional transaction-based systems and operational CRM systems are obsolete? No. Those systems just need to be able to share their information through a data warehousing and analytic structure that brings the parts into a unified whole.

For example, the SAS® Enterprise Intelligence Platform unifies data that resides in a multitude of silo systems and purchased databases to create a cohesive body of corporate knowledge. Customer data can be assembled from every contact point—call centers, e-mail, person-to-person, fax, the Web and beyond—to construct an accurate, consistent view of customers across all available channels.

The integrated knowledge base is continually updated, validated, reconciled and managed for integrity. The knowledge base —“one version of the truth” — disseminates meaningful analysis, insights and action across operational units, customer groups and lines of business to optimize customer value.

Cross-pollination among marketing, sales and service

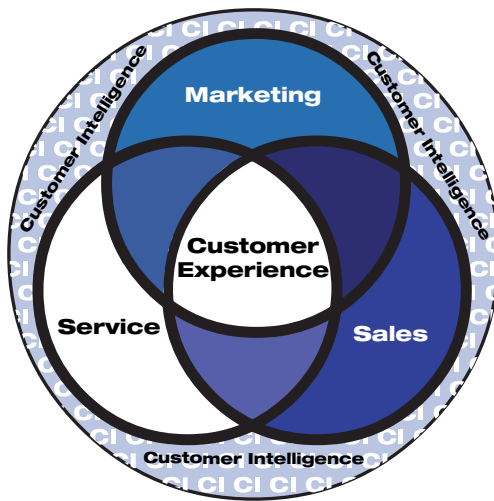
Analyzing data across business units can reveal discoveries that would otherwise remain hidden—insights that are only found by information depth, breadth and correlation.

For example, a service department will have a warranty database to manage claims and payment. Add sales information to the mix, and now you can forecast failure rates instead of just viewing counts. Add product information, and you can compare product performance across assembly locations, build combinations and time. Add data from service centers, and you have visibility into customer interactions and costs across repair facilities and geographic regions. Add all this to your marketing information and you will understand which customers are at risk of leaving.

Customer surveys, marketing data, contact centers, service reports and many other sources contain valuable data that can make the difference between just reacting to trends and opportunities—or predicting and capitalizing on them. The broader the sources, the richer the insights (see Figure 1).



Typical Approach — Silos of Customer Interactions



The Objective: Synchronized, Customer Intelligence-Driven Interactions

Figure 1: The more closely you integrate Marketing, Sales and Service into a unified customer intelligence platform, the greater the “sweet spot” — the convergence of the three, where the greatest richness of shared data (and profit-building insight) can be found.

Apply analytics to drive profitable customer relationships.

The issue. In a dynamic and often unforgiving economy, companies need to predict and manage customer needs, not just react to them. Simple analytics won't deliver genuine customer intelligence: the ability to *anticipate* customer needs based on an intimate understanding of that individual's attributes and behaviors.

The solution. Beyond query-and-reporting tools that tell an organization where it has been, advanced analytics provide insight about where it is headed.

Predictive modeling optimizes customer interactions and accurately assesses each customer's propensity to buy additional products, pay their bills, behave fraudulently or defect to the competition.

Descriptive modeling clarifies important relationships, such as which customers are most similar to one another and how they respond. You can also identify product affinities that show which items sell well together, across many variables.

Forecasting helps you accurately estimate future conditions and prepare for them. You can use forecasting to predict sales, staffing levels, inventory requirements and warranty reserves—and proactively prepare to meet trends in market demand, financial conditions, operating costs and more.

Optimization identifies the most effective combinations of factors (such as price / media mix / customer / offer / channel) to produce peak results *within known business constraints*. You can optimally allocate all resources to achieve desired outcomes more profitably and on schedule, based on overall strategic objectives.

Text mining extracts structure and meaning from unstructured textual data. By exploring and modeling large amounts of structured data as well as text-based data, organizations can uncover hidden relationships and patterns of information.

Experimental design techniques quantify the effects of many different factors (such as color, message, image and component) on outcomes. Understand which factors are causing success or failure, not just which factors are *correlated* with the outcome.

Each technique delivers a different kind of insight and can be applied to multiple business problems. SAS integrates all these techniques into a unified platform, embeds these techniques into solutions, and makes this analytic power accessible to non-quantitative users.

Many organizations that have invested in operational systems count on SAS to make up for analytic deficiencies. For example, many SAS customers produce forecasts and predictions using SAS and feed those back into their supply chain management, CRM and ERP systems to inject intelligence at decision points in those systems.

Translate analytic insight into effective action.

The issue. Customer intelligence is just an academic exercise if it isn't used. Many organizations don't have a framework in place to fully exploit the insights their analytical CRM systems can deliver. Timely information either isn't flowing to front-line staff or into operational systems to drive more effective actions.

The solution. With an integrated platform, everybody has access to the customer intelligence they need to perform their function more effectively. For example:

- Campaign managers can match customer profiles to marketing efforts to make the right offer to the customer via the right channel, at the right time.
- Marketing analysts can understand customer response rates across products and campaigns, and optimize campaign ROI within given constraints.

- Sales people can access the platform to make informed judgments about customer engagements. Does this prospect warrant an e-mail, a phone call or an in-person visit? The system knows.
- The system can automatically note a change in behavior, such as missing a monthly deposit into a bank account, to trigger an action to contact the customer.

This vision is achievable today with an integrated platform that gives all these business users access to analytical insight without requiring them to become statisticians themselves.

Align marketing, sales and service with enterprise-level goals.

The issue. Did a decision drive the organization closer to its goals or not? The “right” decision from the 10-foot view might very well be the wrong decision when viewed from 10,000 feet.

The decision that best benefits my group might be gained at your expense. The decision that keeps a marketing campaign under budget might alienate good customer prospects and ultimately cost more than it gains. The cutback that saves millions in inventory costs could be costing untold more millions in lost revenues, because delivery is sluggish. The prospects that provided easy targets for sales might be creating real headaches for service.

The solution. Informed decisions require coordinated intelligence across the enterprise. That's why forward-thinking organizations are integrating predictive analytics not only within marketing, sales and service, but also for performance management at the enterprise level. For example:

- A leading bank uses SAS to predict which customers are going to leave, three to six months before it actually happens, and with 80 to 85 percent accuracy. As a result, the bank has reduced customer attrition by 50 percent, across lines of business.
- A major car maker used SAS to trim warranty analysis cycles by 70 percent, reduce warranty costs by 34 percent per vehicle, and speed early detection of emerging issues—saving \$2.2 million in the first six months.
- A regional medical center used SAS to modify patient care protocols while monitoring 50 KPIs across the institution, and reduced average patient stay by nearly a day without compromising patient care. This gain increased bed capacity as much as if the hospital had built a new 50- to 100-bed unit.

Summary

Marketing groups were first to embrace predictive analytics, for cross-selling, campaign management, interaction management, customer acquisition and customer loyalty programs. Other functional groups are gradually discovering the value of predictive analytics for identifying unexpected opportunities and anticipating problems. They know that if they don't, they leave money on the table. Money that somebody savvier is ready to grab.

The real winners are the enterprises that realize that true customer intelligence is about more than injecting analytics into discrete decisions or programs. It's about synergistic insight *across* the organization—a holistic perspective that transcends functional and organizational boundaries.

Where ERP and CRM platforms unified operations across the organization, an Enterprise Intelligence Platform now unifies customer knowledge and insight. Analytics can drive success in each customer-facing area, from marketing to sales to service—but you gain even greater value from a platform that can bring all these areas together.

Take advantage of it. It's within your reach, and the Customer of the Year 2007 is waiting.

About SAS

SAS is the leader in business intelligence and analytical software and services. Customers at 42,000 sites use SAS software to improve performance through insight from data, resulting in faster, more accurate business decisions. 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®. **www.sas.com**

Appendix — Analytics-driven customer intelligence in the real world

*A discussion with Retha Keyser,
Manager of customer intelligence business development, SAS*

Keyser discusses the challenges and opportunities facing enterprises as they seek to maximize the value of customer relationships.

Why is it important for companies to synchronize their customer strategies and processes across marketing, sales and service?

Keyser: When I'm planning a purchase, my decision is influenced by many factors, from previous interactions with the company to my research on the competition. How much do I like the product I already have? Were their sales and marketing efforts relevant and appropriate, or overbearing and intrusive? How was I treated when I called with a problem? Did I get courteous attention from a knowledgeable agent, or did I get stuck in an endless IVR loop? Whether or not I bring more revenue to this company depends on how it performed in all those areas.

Furthermore, the interaction is an ongoing conversation. Customers interact with businesses via multiple touch points. Businesses make offers via multiple marketing campaigns. Customers call to initiate, change or cancel relationships. Or request service. These events constitute a potentially broad and deep dialogue that spans all those areas.

Customers are acutely aware of their end of the conversation. They know the context of the whole relationship. And they know when a relationship is going well or headed for trouble, and why. Do businesses know? Often not.

That broad perspective, particularly the “why” of customer behaviors, requires correlating information across marketing, sales and service systems that often don't speak to each other. Many times the first hint of trouble is when a customer defects, even as the latest irrelevant or redundant direct mail offer is being stuffed into his mailbox.

Haven't enterprisewide operational systems helped bridge that gap by assembling a more cohesive picture of the customer's total relationship?

Keyser: ERP and operational CRM systems have been great for automating processes in an efficient manner, drawing on shared records of customer information. It is now easy to automate the process of moving a multi-stage transaction, such as a loan approval, from start to finish and at decision points along the way—with customer information being passed down the line in a structured way.

Retha Keyser has gained extensive experience in CRM through her involvement in various CRM projects in the banking, insurance, retail, travel and communications industries over the past 15 years. These projects have given her an in-depth understanding of how advanced analytics and technology can be applied to assist organizations in improving the effectiveness of their customer interactions, business processes, and sales and marketing strategies, resulting in significant growth in revenues and profitability. Ms. Keyser holds a commerce degree from the University of Stellenbosch, South Africa.

However, operational systems provide only part of the picture. They're about working faster, but not necessarily working smarter. A call center system might tell me that a customer talked with an agent yesterday, but not what they discussed, what the customer browsed on our Web site later, and the implications for today's contact or offer. A marketing automation system lets me ship out tons more direct mail at lower cost than ever, but that might be just turning up the volume on a scattershot effort. More, faster, cheaper is not the path to real customer value.

SAS provides deeper insight into customer behaviors and preferences at the individual level. If you really understand what motivates customers to do business with you, you can pinpoint new opportunities, delight your best customers and salvage at-risk relationships.

Could an enterprise build customer value by optimizing each area individually—marketing, sales and service?

Keyser: Unquestionably, a company would benefit by performing as effectively as possible in each area. You could apply analytic intelligence to optimize marketing activities, sales contacts and service performance separately. But this type of function-by-function optimization has some limitations.

For one, to truly optimize in each area, you would have to know the complete context of the customer's relationship, which spans all those areas.

Second, operational systems cannot help companies interact with customers in the most personalized way at the most opportune moment. At best, these systems can see customers as *segments*, when they want to be treated as *individuals*. Even within one demographic segment, customers are anything but the same. For example, one 45-year-old, college-educated homeowner might enjoy the leisure time to browse a large catalog, while another might prefer expedient one-click access from an e-mail to the desired product. If the company treats both consumers in the same way, it could miss the opportunity on both of them.

Third, if you optimize marketing, sales and service as separate units, you could easily be optimizing one area while cannibalizing success in another, or undermining progress toward enterprise-level goals.

What should enterprises be doing to achieve enterprise-level intelligence across marketing, sales and service?

Keyser: There are two issues here. One is the ability to create intelligence that spans those three areas, that exploits data from all systems that collect customer information. The other is the ability to align activities in those areas with enterprise-level goals, and that's a performance management story. The SAS approach can address both, but an enterprise doesn't have to make the big leap all at once. We can start with a single business issue, and evolve from there.

■ A key focus for SAS has been integrating analytic intelligence into all customer-facing functions—and integrating across those functions to capture the customer's total relationship with the enterprise.

The fundamental issue, of course, is to have up-to-the-minute insight when interacting with customers. SAS creates a unified view of the customer across multiple functions and systems. Analytics based on this foundation can help the company understand what was, what is, what if, and what will be—across hundreds of variables.

However, analytics is just an academic exercise if this intelligence isn't *used*. It's useless if we just say, "Wow, look at what we've discovered about these customers." SAS makes this information available in a consumable format to front-line staff who can use it. It then drives operational decisions and customer interactions, and can be used for continuous learning and improvement.

SAS integrates all these elements—from data to analysis, execution and feedback—into a single Enterprise Intelligence Platform. This approach mirrors the interdependent nature of customer engagement processes.

Wouldn't most organizations, if asked, say they already use analytics to create customer intelligence?

Keyser: There are analytics, and there are analytics. Even software vendors sometimes confuse the issue by using the term "analytics" to describe simple query-and-reporting or OLAP capabilities. That's hindsight, for the most part—not foresight.

If I'm planning a marketing campaign, hindsight shows me how a customer segment has responded in the past, and that might be a fairly good predictor of what they'll respond to in the future. Or not. People change. Conditions change.

With SAS, I can accurately anticipate what they will want in the future, how best to package and promote the offer to suit their unique preferences, and when—and I can accurately predict the outcomes of various campaigns before I commit to them. With advanced mathematical techniques, SAS can also show how to optimize return, given the constraints of limited staff, channel capacity, contact policies or other business constraints.

What steps should an enterprise take to progress from hindsight to foresight—and to unify intelligence across functional areas?

Keyser: We often recommend focusing first on the most critical business issue at hand. If customer churn is the biggest problem driving down share price right now, that's where we'll start. Applying analytics to this issue, we can find out why various customers churn, what will influence them to stay, and what actions will retain them, within the bounds of good business.

This intelligence would be tested in a pilot project. The outcome of the pilot would be fed back into the model to gain yet more insight. When you hit the bulls-eye, now you can implement it for the entire customer base.

We can then expand this approach to another business issue, creating greater depth of customer intelligence with each level of integration and analytic strength. It doesn't happen overnight. It's an incremental and iterative process, where the company can prove the value of each initiative before expanding to other functions or escalating to the enterprise level.

A low-risk approach has appeal to wary IT organizations, but what would you say to their concerns about a piecemeal approach?

Keyser: With the SAS architecture, incremental is not piecemeal. Every element of the platform is pre-integrated, so you can add functionality as needed, without concerns about integration.

Suppose you start with analytically driven campaign management. Then you add the ability to integrate data from sales, and later, contact center systems. Then you want to align campaigns with lifecycle changes, so you add the ability to feed data points into a model that kicks off triggers into a decisioning system and initiates event-triggered campaigns. Then you find you're getting too many leads to respond to, so you add optimization to be smarter allocating resources.

Every step you take in this evolution makes your customer intelligence more sophisticated but not more complex, because the integration has already been done.

Is an analytics-driven customer intelligence platform the proverbial "silver bullet" then?

Keyser: We should be so lucky. No matter how sophisticated the technologies or how targeted the insights, people have to embrace it. You can empower every person in the chain of command with the information they need to drive customer value, but will they use it? People are naturally resistant to change. Will they be willing to forego their own gut instinct for the analytically derived insights of a machine? Are incentives aligned with organization-level strategy?

Here is where change management expertise can help enterprises reap the value they should from their investments in customer intelligence systems. To be successful, you've got to have both sides of the coin: the enabling technology and the human factor to put that technology to maximum advantage.



SAS Institute Inc. World Headquarters +1 919 677 8000 To contact your local SAS office, please visit: **www.sas.com/offices**

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