



SAS® Business Report

MAY 27, 2008

Dear Readers,

You're getting a new editor! I'm taking on some new projects, including the managing editor position for [sascom® magazine](#). But don't worry – I'm leaving you in good hands. You'll meet the new *SAS Business Report* Editor, Waynette Tubbs, in the June issue.

Change is good – in life and in business. In honor of that, this issue is devoted to transformation. Learn how to transform:

- [Customer data into profit](#).
- [Sustainability strategies](#) into competitive advantage.
- Small organizations into [breakthrough companies](#).
- Business users into self-sufficient data analysts [with SAS® 9.2](#).

And see how [in-database processing](#) from SAS and Teradata is transforming data analysis – taking it from days to seconds.

Happy trails!

[Anne-Lindsay Beall](#)

Editor

Transform customer data into profit

Using analytics, make sure you're giving the right customers the red carpet treatment

By Jeff Levitan

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 maximize the value of your customers, how to insulate your best customers 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.

Retailers long ago acknowledged the value of CRM – of mobilizing resources around customer relationships rather than product or merchandise 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, and then even less. Clearly, enterprisewide operational platforms are important but, by themselves, are not a panacea. Automation without insight has only limited potential.

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 come at the expense of enterprise-level goals. Maybe all these optimized processes are delivering a suboptimal customer experience because they didn't adapt to the customers' changing needs.

And boy, are customers changing. Think YouTube, Wikipedia and the blogosphere. The new digital democracy is one where we 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. Your customer may fairly ask, “Why can't your business do as much for me?”

And furthermore: “Why are you sending me a coupon that expires in 30 days just a week after I spent \$500 on clothing at your store?” “Why is the promotion coupon for nonfiction books when I only buy fiction?” “Why am I getting promotions for girls' clothes when I've only bought boys' clothes?” “Why are you barraging me with e-mails for candy when I only order fruit baskets?”

Faster plus more efficient doesn't always equal better. Enterprisewide operations systems can automate customer interactions but alone do not provide the insights needed to enhance the mutual value of those interactions.

These missteps would lead customers to believe you don't understand their needs and don't even

remember them. We're the stars now. If a company wants our money, we want red carpet treatment.

Yet, giving everyone the red carpet treatment can backfire. Consider the case of an international, upscale women's clothing retailer. The company thought its loyalty program was working fine, until it analyzed its data and discovered a substantial portion of customers were taking advantage of loyalty program discounts and returning 90 percent of what they bought – after the season ended.

Some customers just aren't worth the red carpet treatment.

Empowering marketing, sales and service with analytics

How do you find the customers worthy of red carpet treatment – and those who may be groomed to be your future stars? Forward-thinking organizations have amplified their “return on automation” by investing in analytical CRM as well. Analytical CRM provides the understanding and insight to confidently make decisions that drive profitability.

Consider the possibilities. Analytic insights enable retail companies to:

- More effectively identify and retain profitable customers and attract others like them, by creating timely and tailored offers 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 – and a cohesive company image – across all touch points.
- Allocate limited resources – such as budget, staff and IT systems – for greatest advantage.
- Understand how to transform a customer's grievance into a positive experience – or even an opportunity to delight that customer with an appropriate, proactive upgrade.

How can CRM initiatives live up to this potential?

The benefits of analytics are compelling, but they can be elusive too. 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, four key factors are 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 existing technology. It doesn't even require an IT overhaul. You can start small, supplementing existing systems, and add capabilities as the business case warrants. There are five important steps to enable analytical CRM to deliver its promised benefits.

1. Create a unified view of the customer across all touch points with a technology infrastructure that supports this view

Are existing investments in traditional transaction-based systems and operational CRM systems obsolete? No, but those systems need to be able to share their information through a data warehousing and analytic structure that brings the parts into a unified whole. This 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.

2. Cross-pollinate across marketing, sales and service

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

With the example of the women’s clothing chain, it wasn’t until the company matched return data with the loyalty program members that the heavy out-of-season returns came to light. Using information gleaned from multiple sources, the company was able to extend loyalty offers to customers with a low return rate and a record of making some purchases at full price.

3. Apply analytics to drive profitable customer relationships

In a dynamic and often unforgiving economy, companies need to predict and manage each customer’s needs, not just react to them. Simple analytics won’t deliver. Effectively anticipating customer needs requires advanced analytics that provide predictive modeling to optimize customer interactions and accurately assess each customer’s propensity to respond to offers, pay bills, behave fraudulently or defect to the competition.

4. Translate analytic insight into action

Many organizations don’t have the processes and infrastructure 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. With an integrated platform, everybody has access to the customer intelligence they need to perform their functions more effectively.

Sophisticated analysis of large data volumes requires process automation. For example, today’s solutions automate the marketing decision process by automatically generating a consumer offer to a noted change in behavior, such as a drop in shopping frequency. Newer real-time inbound marketing solutions automatically recommend products and offers to consumers via the Web, based on predicted future shopping behaviors.

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

What if the decision that keeps a marketing campaign under budget alienates good customer prospects and ultimately costs more than it gains? 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 instance, a large specialty retailer has “one version of the truth” that eliminated business unit disagreements over financial performance. It is using analytics to improve product mix in each store to come up with the right recipe for the best customer experience. And it is creating stronger partnerships with vendors to help manage inventory.

Embracing a holistic approach

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 within functional silos. It's about insight across the organization – a holistic perspective that transcends functional and organizational boundaries.

Bio: Jeff Levitan is General Manager of Global Customer Intelligence and Retail at SAS. Before joining SAS, he was Chief Operating Officer at Veridium, a leading provider of marketing effectiveness software, which SAS acquired in 2006.

Sustainability and business: In pursuit of the triple bottom line

By aligning people, planet and profit, companies can turn sustainability strategies into competitive advantage

By Alyssa Farrell

The hybrid vehicle in the garage. The fair-trade coffee beans in the pantry. The carefully managed thermostat. The recycled ink cartridges in the printer. What was once a clichéd portrait of the unbleached-cotton-wearing, socially conscious consumer carefully separating recyclables into reusable canvas totes is now a large, growing and demanding demographic that reaches around the world.

And that means – when it comes to socially responsible operations – global business has reached the tipping point. That’s true for both consumer- and B2B-focused corporations.

For years, “green” products were limited to specialty market niches. Up and down the supply chain, environmentally sensitive components, ingredients, products or production processes translated into added costs that meant those goods were purchased by only the most eco-committed consumers willing to pay the premium. Today, however, it’s a different story.

Over the past generation, the calls for organizations to become better stewards of our natural resources, embrace environmentally friendly practices, adopt fair-trade policies and implement “sustainability strategies” have shifted from a small but vocal number of advocates to broad majorities of consumers and governments worldwide. Today, issues such as climate change, energy consumption, labor practices, food safety, pollution and waste management are strong factors in the impressions that companies make with consumers, investors, regulators, watchdogs and other stakeholders.

In its 2007 survey on social trends, the research firm GlobeScan found that the No. 1 factor shaping consumer opinion about a company’s social-responsibility profile was whether it harmed the environment. Furthermore, consumers take that issue seriously: 55 percent of those surveyed in North America said they have punished companies that they find irresponsible. In the US, those discriminating consumers have helped create a \$306 billion “green” market – one that market-watchers think can reach \$850 billion in five years. Because the impact of consumers’ “green choices” reaches far back into the supply chain, virtually every company needs to raise its environmental consciousness to respond to these growing demands.

From an investment perspective, the world’s financial markets are showing interest in the heightened role that sustainability and, more broadly, corporate social responsibility are playing. In the May 2007 *McKinsey Quarterly*, Al Gore and David Blood (formerly the head of Goldman Sachs Asset Management) make the compelling case that investing in sustainability is not merely a “feel-good” measure for the Birkenstock set but a savvy strategy that can deliver above-average returns. Similarly, Dow Jones has created a family of Dow Jones Sustainability Indexes (see sidebar: “Investing in sustainability”) to track the financial performance of leading sustainability-driven global companies. This gives investors options for allocating assets among diverse companies while still remaining true to their principles.

Adopting the Triple Bottom Line

As sustainability moves from the margins to the mainstream and companies turn their attention to assessing the costs, benefits and advantages of the initiatives that markets, industry consortia and government agencies are demanding, it’s a good idea to look at the roots of this concept. Sustainability first appeared on the world agenda when the United Nations applied the term and later founded the Commission on Sustainable Development. Initially, the UN defined sustainable development as development that “meets the needs of the present generation without

compromising the ability of future generations to meet their own needs.” More recently, practitioners have expanded this definition to encompass environmental, economic and sociopolitical aspects.

The UN also promulgated an important term related to sustainability: the *Triple Bottom Line* – or *People, Planet, Profit*. The Triple Bottom Line conceptually expands the traditional financial framework to encompass rigorous reporting on the organization’s performance on sustainability issues such as the carbon footprint, hiring practices and dozens of other metrics. The unifying principle of the Triple Bottom Line is that managing for sustainability aligns with greater efficiency and improved corporate performance. That raises the question: How do companies effectively build a sustainability component into their overall business strategy?

Four steps to responding to the new mandate

Regardless of industry, size or location, strategic management is fundamentally about identifying opportunities and obstacles and navigating through the external environment in a way that makes the most of the organization’s assets, according to three Stanford University business professors.¹ Tools and conceptual maps help managers and executives uncover the relationships between the choices they make and the performance the company achieves.

The key, of course, is to invest the right amount of time and manpower to carefully research and understand all sustainability-affecting aspects of the business. Companies must identify the green-related metrics that apply to the business and – crucially – find the right data to describe and measure those metrics. Predictive analytics tools can help identify the proper leading indicators that predict and measure sustainability performance.

What is measured really matters – and technology can help improve the business’ response to the sustainability mandate in four ways:

MEASURE – By properly addressing the need to integrate and validate data, companies can benchmark their key sustainability activities using industry-accepted methodologies and protocols – such as those promulgated by the organizations (See sidebar: “Sustainability resources for corporations”). For CIOs, it can be as simple as installing smart energy meters into data centers and integrating that data into resource management dashboards. Or it can be as sophisticated as evaluating carbon accounting throughout the supply chain, using guidance from industry organizations. Ultimately, the greatest challenge is accessing and trusting the data.

REPORT – As with financial performance, it’s essential to fully and formally disclose sustainability performance to ensure transparency with key stakeholders and compliance with regulatory agencies – and no longer on merely a casual/annual basis. By regularly disclosing an integrated, consistent source of quality information, companies can bind initiatives to a common sustainability framework that promotes consistency across all lines of business – from the data center to the water treatment facility. Of course, buyers – particularly in B2B transactions – are increasingly savvy. Reporting on metrics alone does not give a clear enough view into the short-, medium-, and long-term strategies of the organization. Instead, it’s essential that companies report on corporate goals and performance relative to targets to avoid accusations of so-called “green-washing.”

IMPROVE – After identifying and measuring the metrics that have the greatest impact on sustainability goals, companies can make more informed strategic decisions. Insights into activity costs provide information on the impact of these strategies on current operating capital, ROI, or rate-of-return mandates and bottom-line profitability. Applying optimization, forecasting and data-mining capabilities to analyze scenarios and run simulations can improve response and successful strategy execution.

FORECAST – Finally, a solid foundation of aggregated and well-structured sustainability data enables the enterprise to manage the resources needed to achieve the desired outcomes across

the organization and within individual departments. Key strategies here include prioritizing organizational strategies and aligning investments in new product innovation, program development and talent management. Scorecards and strategy maps driven by the sustainability goals of the organization also play important roles.

How sustainability creates a Triple Bottom Line advantage

We've seen in other areas how new regulatory and market demands create significant frameworks that, undeniably, add non-product overhead to the costs of running the business. Sarbanes-Oxley is an excellent and well-understood example. However, SOX also provides a template for how companies can leverage those compliance expenses into competitive advantage. Simply put: Properly directed, the efforts that companies devote to improving their sustainability posture can pay substantial returns in the forms of lower costs, an enhanced competitive position, improved product quality and a more appealing corporate image.

In their book *Green to Gold*, authors Daniel Esty and Andrew Winston identify dozens of examples of companies that have put sustainability at the top of their agenda – and achieved meaningful results and tangible and intangible advantages:

IKEA – The legendary maker of assemble-it-yourself furnishings lowered its supply-chain costs by dramatically reducing the environmental impact and financial costs of its product distribution. The company strives for “flat packaging” that squeezes every cubic inch out of every box. That lets IKEA pack its trucks and trains much more compactly and increase its fill rate as much as 50 percent. The result: decreases in fuel consumption by as much as 15 percent. In one instance, the company trimmed three centimeters from a box for a sofa, enabling it to fit four more sofas on a trailer.

Hewlett-Packard – Customers of the dominant printer manufacturer were increasingly reluctant (or unable) to dispose of old toner cartridges for its acclaimed laser printers. Nimble competitors selling reconditioned cartridges were also eroding the lucrative after-market of a key HP business. In response, HP launched “Planet Partners,” a high-margin, \$100 million recycling and remanufacturing business that recycles 11 million cartridges each year.

General Electric – As part of its groundbreaking “ecoimagination” campaign, GE set forth an ambitious list of goals: reducing greenhouse gas emissions, ramping up R&D investments in environmental technologies, and more. The company monitored its campaign using scorecards to assess the environmental strengths and weaknesses of 17 key products it concluded were the best candidates to improve customer operating and environmental performance – from jet engines to solar panels. As Esty and Winston note, “With a focus on specific products, ecoimagination is as much a product play as a committed effort to go green: GE wants to sell those jet engines, not just have environmentalists admire them.”

Citigroup – In 2004, the financial services leader conducted a simple test in a small subset of its offices. It bought 30-percent-recycled paper for printers and made double-sided copies its default standard. The simple test reduced paper consumption by 10 tons and \$100,000. The energy saved in the paper-making process reduced greenhouse gas production by 28 tons. A simple initiative like this gets the attention of the entire organization.²

Sustaining the movement

The UN Climate Change Conference 2007 in Bali set a course for negotiating new sustainability targets by 2009. Meanwhile, independently expanding country-specific regulations will challenge global organizations, many of which have expanded outside their home country for competitive advantage in new markets. In the coming years, steadfast focus on aligning the elements of the Triple Bottom Line will be a necessary guiding principle for virtually every organization.

¹ *Strategic Management, Saloner, Shepard and Podolny, 2001.*

² *Examples included with kind permission of authors Esty and Winston.*

Bio: Alyssa Farrell is the Marketing Manager for Sustainability Solutions at SAS.

Characteristics of breakthrough companies

Aligning words and deeds is the single most important building block in creating strong company character

Keith McFarland's new book *The Breakthrough Company* reveals strategies of companies that have broken through the entrepreneurial phase to become established, long-lasting organizations. These companies have excelled by demonstrating character and values and believing in their employees.

McFarland discovered that how the people in a company treat each other and their customers is vital to breakthrough. This excerpt describes how SAS and other breakthrough companies are setting precedents for aligning priorities based on the good of the organization.

Every breakthrough company approached the issue of company values in a slightly different way. When the Express organization gathers once a year for their annual meeting, they vote on what they call their "family values." The Staubach Company has its constitution, and Fastenal hands out wallet-sized, laminated copies of its values. Paychex, on the other hand, doesn't have a printed list of values. Neither does Chico's or the SAS Institute. Similarly, when we talked to Bob Nygaard at Polaris about his company's value statement, he dismissed it with a wave of his hand, telling us it was something a consultant helped them draw up. "What I can tell you is that no one who works here would do anything to put our company in harm's way." Although each of the breakthrough companies had a unique approach to articulating values, they share several important character attributes when it comes to how they treat their employees and their customers, and even how they spend their money.

Give folks a fair deal

When we interviewed Jim Goodnight, founder of North Carolina-based SAS, he told us that his two goals right from the company's start in 1976 were to make software that customers needed and, just as important, to create an environment that his employees would enjoy working in. "I wanted a place where life's distractions wouldn't get in the way so that the creative juices could flow," Goodnight told us.

Goodnight was a graduate student at North Carolina State University when he and his SAS co-founders ventured out on their own after the academic funding for their statistical analysis software project ran out. In launching SAS, they sought to make their company more collegial than the corporate environment of General Electric, where Goodnight worked on a project for NASA while finishing his PhD. While he found the work at GE stimulating — he was working on a project for the Apollo space program — he felt like someone was always looking over his shoulder. Things would be different at his company, he vowed, and one way he accomplished that was by giving most employees at SAS their own private office. "I know for a fact that most companies just give people cubicles to work in," Goodnight said. "What we tried to do was to treat people who joined the company as we ourselves wanted to be treated."

SAS has become famous, among working mothers especially, for its vast array of benefits, which includes the private offices on a parklike, 300-acre campus, but also onsite doctors and nurses, a top-notch day-care facility, and even a hairdresser who takes walk-ins. Goodnight's goal of treating people fairly has also proven to be a great business strategy: SAS has increased its revenues every year since 1976 and is now considered the largest privately held software company in the world.

Compare that performance with that of SPSS, a company similar to SAS in many ways, including its campus roots. SPSS got its start in 1971 at Stanford University, and later at the University of Chicago. The company's name is actually an acronym for Statistical Package for the Social Sciences. By the early 1980s, each firm was earning about \$20 million a year. But by the early 1990s the two companies' paths diverged. Norman Nie, who cofounded SPSS, left the company

in 1992, two years after a group of venture capitalists took a stake in the firm, and one year before SPSS went public. SPSS then engaged in a flurry of acquisitions to try to fuel its growth, shed a lot of skilled workers, and actually began reducing the amount it invested in R&D. SAS, on the other hand, continued under the same management team, made few acquisitions, took no outside capital, and continued to increase its R&D investments, which equal, on average, 24 percent of revenue. The results are telling: While SPSS posted revenues of more than \$261 million in 2006, SAS posted its thirty-first straight year of growth, topping out at \$1.9 billion in sales. Today SAS works with 96 of the top firms listed on the 2007 Fortune Global 500 list. “We continue to invest in our people so we don’t need to make acquisitions,” Goodnight told us. “While we have done a few, buying other companies is really about satisfying the CEO’s ego more than anything else.”

Scaffolding defined

When we first launched our study, we expected to turn our microscopes on the nine breakthrough companies themselves. But, as our reporting began to give us a deeper understanding of how those companies operated, we began to see the outline of a bigger reality: Each breakthrough company was surrounded by a network of outside resources vital to its success. We call these resources “scaffolding” because, like physical scaffolding, they are temporary structures that exist outside of the organization itself and enable the company to get to the next level. While YPO and other peer networks can be important forms of organizational scaffolding, we found that breakthrough companies are also adept at using other forms of scaffolding, such as advisory boards, boards of directors, and customer or dealer councils, as well as investors, industry experts, consultants, and advisors. What sets the breakthrough companies apart, however, is not that they have these support structures (many companies have boards or hire consultants), but the optimal manner in which they learn from them. Just as breakthrough companies invest heavily in their employees and expect a lot in return, they have equally high expectations of outsiders upon whom they come to depend.

The comparison companies we studied, on the other hand, appeared to be more insular and less eager to form real partnerships with people outside the firm. For example, while some of the comparison companies we studied formed customer councils or held regular user-group meetings, these meetings tended to be highly scripted broadcast events that involved one-way communication. Compare that to SAS, which allows its customers to determine its development priorities through a sophisticated customer poll — the [SASware Ballot](#). SAS tech support reps listen to the kinds of things that customers want, and the top items get included in the ballot — which is sent out to the entire customer base. In this way, customers, not SAS engineers or marketers, determine the development team’s priorities. This is unheard of in the software industry. “I remember when we hired a sales manager from one of the other big software firms,” Suzanne Gordon, SAS’s CIO, told us. “He was completely dumbfounded by his first user-group experience. He told me that while his old company held user-group meetings, that they were viewed by customers as an obligation, or an opportunity to pick up some freebies. He was blown away by how we actually listen to our customers, and they love us for it. Our biggest risk is that we stop listening to our customers and start reacting to our competitors instead.”

From the book [The Breakthrough Company](#) by Keith McFarland. Copyright 2008 by Keith McFarland. Published by arrangement with Crown Business, a division of Random House Inc.

Bio: Keith McFarland, of McFarland Strategy Partners, advises hundreds of growth companies as well as industry leaders such as Microsoft, Motorola and Morgan Stanley. He is also a columnist for *BusinessWeek*.

Transform your business with enterprise intelligence

With the release of SAS® 9.2, it's easier than ever for you to solve your business problems and stay ahead of your competitors

By Gaurav Verma

For 32 years, companies worldwide have turned to SAS to help them gain business intelligence that gives them a competitive edge. Now, SAS 9.2 gives customers even more power and flexibility to do this and more.

The new release of SAS software helps organizations gain the value they expect from SAS with more ease. SAS 9.2 was designed to help the business user become more self-sufficient and help IT deliver to the business more effectively – improving their credibility and reputations.

SAS 9.2 helps transform businesses by delivering:

- **Advanced analytics.** Customers can analyze data in more ways with new algorithms and procedures, gain more insight through enhanced data and process visualization, and process large and complex data sets faster.
- **BI in more places.** Users will become more self-sufficient with simpler, role-based interfaces. They will be able to embed SAS results into business processes more easily through Web services and create and consume stored processes with more SAS products through a single metadata repository. In addition, they'll have the ability to accelerate rollouts and simplify administration through a single interface.
- **Collaborative data integration.** Customers will be able to define components and reuse them as needed to streamline the design process. The use of electronic sticky notes will allow users to communicate with each other across the workflow more easily. Users will also be able to monitor the data integration process and troubleshoot failures more efficiently with alerts and automated recommendations for fixes.
- **Enterprise-class software improvements for IT.** Users can streamline the deployment and configuration process with a new wizard-based interface and take advantage of standards for systems management, security and change management.

New capabilities and deployment opportunities

SAS 9.2 advances key analytics capabilities, including new and improved modeling capabilities, easy-to-use production-quality graphics, and a wealth of enhancements to many existing procedures. From new Base SAS and Output Delivery System (ODS) capabilities through to numerous new statistical methods, analytical capabilities and graphing capabilities, SAS 9.2 will deliver much-needed benefits to the SAS user community.

SAS 9.2 also features support for numerous new platforms and opens a new world of deployment opportunities on well-known and established hardware and operating systems.

The SAS 9.2 enhancements and benefits include:

- **New analytic capabilities:** Users will find hundreds of changes and enhancements to SAS/STAT®, SAS/ETS®, SAS/OR®, SAS/QC® and SAS Stat Studio.
- **Statistical graphics created automatically by procedures:** With SAS 9.2, analytics procedures now create production-quality graphics as automatically as they create tables. ODS Statistical Graphics are used in more than 50 Base SAS, SAS/STAT, SAS/ETS and SAS/QC procedures.
- **More manageability for SAS® processes:** SAS 9.2 enhances the manageability of SAS processes that will be executed in batch and improves the traceability of SAS programs. This mechanism offers tremendous value for program and batch auditing and tuning.
- **Easier deployment:** With SAS 9.2, customers can obtain their software electronically over the Internet, giving them more distribution options.

- **Lower hardware cost and more choices with x86/x64 enhanced support:** Through increased support for x64-based environments, SAS 9.2 technologies will be available as a 64-bit enabled application supporting 64-bit extended architectures. This will enable customers to build upon affordable and scalable commodity hardware.
- **Improved output options:** Users will receive universal printer support for TrueType font output to all supported operating environments, improved font support in ODS (including five new Latin fonts, eight multilingual Unicode fonts and eight monolingual Asian fonts), and improved distribution format options in both.

The value of analytics

As organizational information needs grow in complexity, enterprise intelligence software should not. Analytics that previously were available only to technical users can now be placed in the hands of all decision makers to drive accurate decisions and better results. SAS offers an integrated and comprehensive platform for fast implementation and deployment of reports and analysis, enabling organizations to quickly achieve optimal results.

SAS 9.2 continues to build on SAS' core competency in the area of advanced analytics. It provides the addition of more advanced algorithms for data analysis across all of SAS' core analytical products. With SAS 9.2, users will have access to more sophisticated analyses directly from their interface of choice without having to constantly seek assistance from IT.

A strong partnership

SAS' success over the last three decades has been based on the partnership approach we create with our customers. The improvements offered in SAS 9.2 are a direct response to requests from our customers. We are committed to helping them fully optimize their use of SAS and realize the benefits provided in our latest release. With SAS 9.2, organizations can remove the barriers to productivity, create a culture of fact-based decision making, and drive even more value for their company.

Bio: Gaurav Verma, Global Marketing Manager for Business Intelligence at SAS, drives SAS' global Enterprise Intelligence Platform marketing strategy and positioning. He focuses on persona-based marketing, awareness and messaging for SAS' business intelligence and information management solutions.

Better together

The new partnership between SAS and Teradata allows SAS users to analyze data in the Teradata Database for faster performance. The integrated solution allowed a large insurance company to run queries and flag potentially fraudulent items in seconds instead of the two to three days it used to take.

Online only at:

<http://www.sas.com/partners/directory/teradata/q2teradatamag.pdf>

Events

Smart Growth: High Performance and Sustainability Through Analytics

<http://www.sas.com/events/cm/175813/index.html>

June 10 – 11, Cary, NC

F2008 Business Forecasting Conference

<http://www.sas.com/events/fx/>

June 2 – 3, Cary, NC

Live Webcast: Forecast Value Added Analysis

<http://www.sas.com/events/cm/176129/index.html>

June 4

M2008 Data Mining Conference 2008

<http://www.sas.com/events/dmconf/>

Oct. 27 – 28, Las Vegas

Multimedia

On-demand Webcast

<http://www.sas.com/events/cm/165049/index.html>

Find out how to outperform the competition with analytics.

Get the CFO's guide to analytics

<http://www.sas.com/events/cm/370067/index.html>

View this Webcast to hear two of the market's most influential thought leaders.