

Signals

LETTER FROM THE CEO

SPRING



is the season of new growth and strong winds in our corporate headquarters city of Santa Fe, New Mexico. This very old town gets buffeted by the strong, erratic blasts of air coming from the steep mountains to the north and east, and the mesas to the south and west. It is, quite frankly, the only time of year we might think we'd rather be somewhere else. This spring the winds of change are also sweeping the U.S. economy with a force unseen in many years. It is an opportune time to introduce our corporate newsletter—Signals—a communication we hope will shed light on the analytics of dealing with change and instability—indeed today's reality.

please turn to back cover >>>>

Tomorrow **Will** be Different

Quantifying the reality of consumer dynamics

Nature often takes the lead. When it comes to providing a laboratory for the development of new analytic technologies, weather patterns, speech patterns, and sunspots have been examined by academics for their underlying structure and potential for spawning advances. At Strategic Analytics, we've chosen instead to focus on the complexities of consumer behavior for our guideposts. Our team has decades of experience studying complex and

chaotic systems. The dynamics of consumer behavior, critically important to the businesses of our clients, demand a fundamentally new approach to data mining.

Consumer behavior is nonlinear and highly dynamic—consumers adapt their relationship with a company's product or service, but the environment in which they exist is unstable. Product or policy changes, competitive offerings, seasonal effects, and macroeconomic conditions can all drive dramatically different behaviors. Most technologies designed to

to determine what aspects are related to events and actions of a particular time frame. We quantify such shocks in the form of an exogenous curve. This curve represents the consumer's response to product and policy changes, as well as seasonal effects and macroeconomic conditions. The curve provides invaluable feedback for setting acquisition strategy and product features—and for projecting customer lifetime value and portfolio performance.

Traditional approaches lack such quantification of environmental impacts. Consequently, a model built using historical data is implicitly projecting that the past environment will recur. Practitioners refer to the resulting error in projected portfolio

metrics as model drift. More than indicating that the models will degrade over time, model drift guarantees that the models will fail in times of rapid change—precisely when they are most needed. The table at right illustrates the magnitude of drift expected in key portfolio metrics, relative to projections provided by standard modeling techniques.

Through quantification of exoge-

Today's business decisions are driven by models encapsulating yesterday's reality.

project consumer behavior gloss over these factors, preferring the simpler approach of assuming that tomorrow will be like yesterday. As a consequence, tomorrow's business decisions are driven by models that meticulously encapsulate yesterday's reality.

In contrast, Strategic Analytics' technology extracts power from the dynamic nature of consumer behavior. We examine that behavior

T A B L E

Over the course of a year, models can drift dramatically. This table shows the drift observed on real consumer data in a calm economic period.

Odds of Model Drift	By This Amount or More in One Year.
1 in 2	26.4%
1 in 5	51.5%
1 in 10	66.0%
1 in 20	81.6%
1 in 50	97.8%

nous impacts, and the ability to assert new environmental scenarios for the future, Strategic Analytics' technology is revolutionary. Static models of behavior are replaced by customer lifetime value metrics computed across a range of future environments. Consumer segments are defined based upon intrinsic consumer behavior, not the environment present when they became a customer. Scenario-based portfolio forecasts replace muddled extrapolations of past results. Portfolio risk

In today's environment razor-sharp analytics are a key to survival.

management is based upon a broad range of simulated futures, all reflecting the reality of environmental change.

In today's competitive environment, razor sharp analytics are a key to survival. The current generation of models has been tuned and retuned to its limits, and the demand for more accurate tools requires more than incremental change. We believe businesses seeking new means of competitive advantage will adopt approaches recognizing that tomorrow will indeed be different.

At Strategic Analytics, we are committed to helping them succeed. ●

Team Spotlight

Scientist Joe Breeden aims for real world solutions

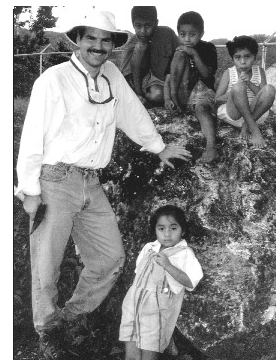
Take a walk around the corporate offices in Santa Fe and you'll usually find Joe Breeden near a white white board, writing formulas and drawing pictures, depicting the framework in which Strategic Analytics technology operates. It's the way this company's president and chief scientist communicates and clarifies the new approaches he proposes. Questions arise, the drawings are edited, sometimes redrawn entirely, and often become fused with a "to-do" list. And it's done in a quiet, studied way, with his authority only enhanced by the baseball cap on his head.

When you meet Joe, the last thing you think of is chaos. Yet his PhD thesis, back in 1991, centered on real-world applications of chaos theory, genetic algorithms, agent-based simulation, and complexity. His career since has used such advanced analytic technologies to solve tough business problems—usually problems emanating from change, crisis, and the challenge of dealing with the unexpected. An underlying theme has been the fusion of business knowledge and experience with analytics—or as Joe puts it, "merging human intuition with computation."

Joe co-founded Strategic Analytics in 1999, following a three-year period with the Center for Adaptive Systems Applications. While at CASA, Joe created a consumer lending portfolio management tool for emerging markets, a merger and acquisition simulator for telecommunications, and a product features optimizer for biotech. His work for a major multinational bank gave him first hand experience of emerging market crises. In Argentina, just after the Mexican

Peso Crisis, he analyzed the bank portfolio's response to the situation and the impact of management before, during and after the crisis. Projects in Thailand and Indonesia brought him to the center of the Asian economic turmoil and its aftermath.

Through these experiences, Joe came to acknowledge the shortcomings of current portfolio analytics, and developed his concepts for innovative



JOE BREEDEN:
Fossil hunting in Cental America with friends.

approaches to forecasting that has infused his development work at SA. He also formed his "no think-tank" approach to deploying analytics—an approach intent on providing true solutions that demonstrate excellent value in solving real-world problems. "We first ensure we understand the client's issues as business people—then we find ways to bring advanced approaches to solve them. We deploy the analytics to solve a real problem—not to exercise technology for its own sake. It's a philosophy that is fundamental to our success as a company."

Which is not to say you won't ever have a very interesting discussion with Joe about correlation structure, error estimation, and nonlinear functions. Just be ready for your turn at the white board. ●

FLARE
We understand client issues as business people

The Goods

Struggling to explain recent portfolio performance? Looking for a customer segmentation scheme that really works? Need accurate forecasts of key performance metrics that reflect your organization's latest business scenarios for your upcoming business planning and budgeting efforts?

These are just some of the issues SA clients explore using our patent pending **Dual-Time Dynamics (DtD)** technology. Now this breakthrough technology is accessible through consulting arrangements with Strategic Analytics. We've designed our **Case Solutions** for just this purpose. You tell us what portfolio issue has you looking for answers, and what historical data is available. We propose a tailored study that includes data preparation, analysis, and reporting and gives our versatile portfolio dynamics engine a workout with no strain on your resources. You get a new view of what's driving portfolio value and what's coming along that will take it up or down. ●

FLARE To see what that can do for your organization, contact David Franklin at 505.438.9501 x102 or write us at franklin@strategicanalytics.com.

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letter from the CEO

The good news is that there are exciting new techniques that can assist our clients in maximizing the value of their customer relationships in the face of such change. Indeed, those who master the art and science of change may be the most successful of all. We hope that is you. Welcome to Signals from Strategic Analytics. In this quarterly publication, we will bring you news and views regarding portfolio and community analytics, and the challenges faced by firms seeking to maximize customer and portfolio value. Our intent is to describe those challenges and offer insights, novel solutions, and the directions we (and our guest writers) see for the future. We welcome your interest and feedback! ●

R. DAVID FRANKLIN
CEO

Company News & Notes

Strategic Analytics welcomed its first outside investment in February 2001. An investor group headed by several senior financial services executives instilled both equity capital and a strong vote of confidence in the company and its capabilities. We look forward to a productive partnership with our first investors. ●

Signals is published quarterly by Strategic Analytics, Inc., for our clients, investors, and partners. To provide feedback, a change an address, or to request a subscription, please write:

8 signals@strategicanalytics.com

* Strategic Analytics 3900 Paseo Del Sol,
Santa Fe, New Mexico, 87505

(505 438 9501