_experience the commitment™

The Past Predicts the Future

Leveraging behavorial data to improve decision-making

By Paula Salerno

As the global economy begins to rebound, progressive financial services organizations are applying lessons learned during the financial crisis to make better credit decisions. One such lesson is that no longer do credit bureau scores alone provide a full view of a customer's credit worthiness. Analytic and decision strategies are evolving that include a more robust and precise view of risk.

Traditionally, two models have been used to determine a customer's access to available credit or services. Credit-scoring models use data from credit bureaus and customer applications to establish lending amounts, terms and conditions and pricing for new applicants. Behavior scoring models predict future performance of existing customers, allowing for segmentation and treatment based on expected risk. Typically, behavior models are based on historical account data, such as payment and usage history.

But these models do not tell the entire story of a credit-seeking customer, and opportunities exist to use *both* credit and historical data to more fully assess the risk level of incoming customers. As accurate forecasting and profitability play an increasingly important role in customer relationship management, organizations need more sophisticated techniques to improve originations, marketing and customer service campaigns now and into the future.

A Hybrid Approach

By utilizing a hybrid approach of these traditional models, and applying behavior modeling to the up-front credit management process, companies can apply a more knowledge-based strategy to make credit and treatment decisions. Here's how it works:

- The organization determines the definition of a low-risk customer vs. a high-risk customer, based on performance or profitability.

- Data is gathered on past customers meeting those definitions, including historical payment and credit usage, as well as credit score at point of application.

- A behavior model is developed, assigning values, or weights, to each statistically significant attribute, relevant to the organization's unique business.

- The behavior model is then applied to existing customers to forecast how a *new applicant with a similar credit score* will behave once they are a customer.

- Strategies are developed to apply different treatments to each new applicant based on their credit risk and forecasted behavior.

Identifying creditworthy customers and those more/less likely to pay on time allows the organization to target terms of acceptance, ultimately increasing the profitability of the portfolio, while allowing for enhanced customer relationships.

The credit and risk management process is a life cycle, with a series of interconnected activities that together build a strong, information-based customer relationship. Organizational boundaries, based on profit and loss accountability or functional responsibility, often isolate managers and encourage sub-optimal results or conflicting objectives. Leaders who encourage synergies in these areas create more sophisticated credit risk management and portfolio management capabilities and enhanced performance.

The Risk Management Continuum

Applying a behavioral model on the credit lifecycle allows companies to offer low-risk customers an array of credit or loan options. Add-on services, upgraded products and increased credit lines are marketed to those predicted to be credit responsible. Conversely, those who are found to carry the most risk will spend the majority of their time within the collections or recovery segments of the lifecycle.

A major telecommunications carrier is deploying a behavior scoring system to segment its customer portfolio, quantifying customer risk based on factors such as payment history, customer demographics, and – as part of the hybrid approach – original credit score. Based on similarity of credit score, data from this model is used in conjunction with the credit scoring model to determine future performance of *new applicants*. Targeted treatments are then applied to each applicant, such as requiring a deposit or risk-based pricing.

Making it Work for You

Make the business case for behavior modeling based on your anticipated return on investment. Advanced analytics can be expensive to develop and complicated to implement. Factor in all advantages to implementing a behavior-based risk management solution by considering the ROI, including reduced back-end losses and increased revenue.

Define risk. Every company does this differently, based on business priorities. A customer who is at lower risk of becoming delinquent is typically one who pays on time and carries lower debt. But in today's economy, is a customer who paid 30 days late still considered one with a high propensity for risk? It is important to consider not just risk, but also profitability, if appropriate data is available.

Understand the amount of reliable data you currently have available. Draw on an extensive landscape of customer data from a variety of sources to create customer profiles that provide a true understanding of trends. You'll need portfolio data for a minimum of one year, and make sure to capture original credit score since it's matched to new applicants.

Look to those who can help. Analytics experts can help you define a risk management modeling strategy, assisting with data review, risk definitions and technology deployment, to help you create an information-based strategy to maximize efficiency and results.

The bottom line: Your customers' pasts can predict your company's future. For organizations looking to capitalize on the most effective and accurate decision-making strategy – and better manage their risk – behavioral modeling coupled with a feedback loop to the credit scoring environment may be the ideal option.

Paula Salerno *is an Executive Consultant at CGI Technologies and Solutions, and has over nineteen years of financial services consulting experience in consumer loan acquisition, risk management and business process automation.*