Forecasting helps Wescom Credit Union save millions of dollars

Financial institution increases lending decision accuracy by at least 50 percent

Wescom Credit Union needed a way to assess risk and make decisions about loans in a smarter, more cost-effective way. It succeeded. By using an analytics-driven approach, the company saved on potential losses. How? Wescom increased the accuracy of lending forecasts, simplified the process for meeting regulation requirements and improved portfolio response.

Without forecasting, you have no accountability.

David Gumpert-Hersh
Vice President of Credit Risk & Econometrics

The credit union now closely pairs its risk appetite (a measure calculated in dollars, which matches risk levels approved by the Wescom Board of Directors to the credit risk of Wescom lending operations) to its portfolio risk levels on a monthly basis. "To make the best credit decisions, you have to know all of the facets of your business," says David Gumpert-Hersh, Wescom Vice President of Credit Risk & Econometrics. "We are able to forecast five years out, and mitigate excess loan losses."

Historically, credit unions only had analytic tools that considered risk at the individual loan level. But Wescom wanted a solution that would forecast possible losses and enable mitigation activities for a portfolio of loans. With SAS®, Wescom has a better understanding of its loan-level risk well beyond the individual loans.

Furthermore, the company can account for economic cycles that affect the credit union's portfolio risk. By incorporating broader economic variables, Wescom can capture the performance effect from seasonal and one-time events. The credit risk group can then calibrate the dollar impact and measure it against the risk appetite set by the board.

"We want to provide members with credit while ensuring the ongoing safety and soundness of the credit union," says Gumpert-Hersh. "Now we're able to measure risk more effectively with multiple scorecards through a 'weighing' verses a 'voting' methodology." When a voting methodology of credit analysis is performed, all parameters would generally have to be met, which can eliminate accounts on the fringe that perform well. However, a weighing methodology (scorecard) delivers a single numerical value, in rank order, for a combined model of multiple credit parameters by balancing, prioritizing and "weighing" each by their individual and cumulative predictive capabilities. "This information helps us evaluate loan performance with more precision than a single attribute or score, such as a FICO or bankruptcy score," he explains.

Wescom updates loan loss forecasts each month for a "rolling 60-month view." The forecasts are a five-year forward look at performance with economic impacts (econometric cycles) and quality adjustments (credit cycles) over this timeframe. The credit risk department has designed, developed and executed an "Allowance for Loan and Lease Loss" (ALLL) calculation on an ongoing basis as well as intervals as requested by regulators. "We use approximately 2.5 million records," says Gumpert-Hersh, "and pull in 350 economic indexes with 30 years' worth of data stored on SAS servers, ready for use."

Due to an easy-to-use interface, Wescom created initial forecasts in two weeks rather than six months as originally anticipated. "That was our entire ramp-up, and it resulted in enormous gains," says Gumpert-Hersh. "SAS provided a full package in terms of project delivery that was informed and supported by consulting. Return on investment was huge."

Avoiding losses, protecting the business

Wescom can access, extract and transmit data in a secure and consistent form from multiple sources, including six internal operational systems covering 20 different products and external data sources like Moody's and Experian, plus automated value models from CoreLogic.

The credit union is using analytical models and scorecards to:

- Accept or decline local applications.

- Focus on particular economic sectors, such as transportation, and include impacts such as fall-off in international trade.

- Concentrate on potential credit issues with current members, targeting efforts to avoid bad debt.

- Produce "take rate" forecasts for promotional offers.

- Forecast expected performance at the loan and product levels.

- Conduct "pre-approved" credit offer screening, which can occur every quarter as the overall campaign expense has become exceptionally cost effective.

- Measure, maintain and report on risk appetite.

"We can work with at least 50 percent greater accuracy when deciding whether a loan will 'perform' or 'not perform,'" Gumpert-Hersh says. "We can also avoid adverse selection, which can be extremely detrimental." Productivity is markedly up. "I have time to work more strategically with other executives at the credit union on risk and risk appetite pairing," he adds.

A nuanced understanding of credit risk

The accuracy has led to an interesting dynamic. Since taking this analytic approach, the credit union has increased the percentage of automobile loans offered with pre-approvals to 65 percent of all auto loans. At the same time, Wescom maintained a low delinquency rate, 0.24 percent, on these same loans.

With this dynamic, executives questioned whether the credit union could be more assertive in offering pre-approved loans in other products while keeping within its risk appetite. Gumpert-Hersh explained how the performance forecasts, pre-approvals, risk appetite and marketing campaigns were integrated into one process to decrease costs and accurately measure risk.

By using analytics to find the best candidates for pre-approval offers, the credit union increased its marketing campaign acceptance rate from 3.4 percent to as high as 6 percent in a single quarter. These improvements are directly attributed to more targeted marketing based on predictive analytics. Analyzing big data ultimately drives measurable low-risk loans at a lower marketing cost.

"Through real-time risk measurements paired to our risk appetite, we've been able to use updated criteria for the extension of credit, more effectively set credit lines and introduce new collections procedures where necessary," said Gumpert-Hersh. "Thanks to forecasting, mitigation and strategic planning enabled by SAS, Wescom saved millions of dollars and improved forecasting accuracy. Most importantly, our board is confident that the risk Wescom takes on is carefully measured and consistently within our predetermined risk appetite."

Challenge

- Focus on credit risk.

- Meet regulatory requirements.

- Improve performance.

- Derive and measure risk appetite.

- Protect against credit losses.

Solution

- SAS® Credit Scoring

- SAS® Forecast Server

Benefits

- Saved millions of dollars in charge-offs.

- Reduced risk and improved business performance.

- Increased lending decision accuracy by at least 50 percent.

- Doubled pre-approved marketing campaign acceptance rates.

- Measured, maintained and reported on risk appetite.