



Guidewire Predictive Analytics

Buckeye Insurance Group Achieves Sustainable, Profitable Growth for Personal Lines

USE CASE

Challenge

Ohio-based Buckeye Insurance Group aimed to grow its auto business. The company wanted to take rate action, but it also wanted to go beyond the traditional rate revision process to gain more sophisticated pricing capabilities.

Solution

Buckeye contacted its reinsurance broker, Guy Carpenter, in search of a predictive analytics solution. After evaluating several vendors, the company chose Guidewire Predictive Analytics™ for both its machine learning software platform and its actuarial consulting expertise.

Buckeye and Guidewire partnered to create an innovative rating program. The new rate structure used standard rating factors derived from generalized linear modeling (GLM), combined with new rating tables created by Guidewire's proprietary machine learning algorithms.

GLM provided an elementary base for Buckeye's rating, while the Guidewire Predictive Analytics machine learning discoveries took Buckeye to the next level by incorporating complex variable interactions. These variable interactions described fully credible segments of loss characteristics and became new rating factors, enabling Buckeye to price and select risk more profitably. Although these risk patterns had always existed in Buckeye's data, Guidewire's machine learning technology made their discovery possible.

Results

Guidewire completed the data preparation and modeling in just three months. The machine learning analysis uncovered significant segments of underpriced business, and Buckeye chose to take targeted rate action. The new rating plan was launched after receiving Department of Insurance approval in each of the states in which Buckeye operates. One year after implementation, Buckeye's



About Buckeye

Ohio-based Buckeye Insurance Group specializes in providing personalized insurance coverage to customers living in rural communities in several states.

Benefits

- Increased top-line premium by more than 10 percent
- Decreased loss ratio by four points
- Improved new business conversion
- Improved retention

written premium had increased by more than 10 percent while the company's loss ratio decreased by four points. Key Performance Indicators (KPIs) pointed to sustainable success:

- Top-line premium increased.
- Loss ratio decreased.
- New business conversion improved.
- Retention remained steady to slightly up.

What's Next

Buckeye is already expanding its relationship with Guidewire to implement new rating plans for other lines of business. In addition, the company is leveraging its machine learning capabilities even more with scoring. The expected result is that Buckeye will increase its pricing accuracy further with granular data that enables more accurate insight into individual risks and less rate volatility when policy characteristics shift.

About Guidewire

Guidewire delivers the software that Property/Casualty (P/C) insurers need to adapt and succeed in a time of rapid industry change. We combine three elements – core operations, data and analytics, and digital engagement – into a technology platform that enhances insurers' ability to engage and empower their customers and employees. More than 260 P/C insurers around the world have selected Guidewire. For more information, please visit www.guidewire.com and follow us on twitter: @Guidewire_PandC.