Predictive Analytics 2.0

Effective integration of predictive modeling

Predictive modeling has gained traction in the property and casualty (P&C) market and is becoming one of the key differentiators driving high performance in insurance today. Using extensive analysis of historical data, predictive modeling produces a reliable algorithm that calculates a predictive score.

As P&C companies face mounting challenges, predictive modeling can help predict the measure of underwriting outcomes, such as loss, to enable improved risk selection and proactive management of non-renewals. This insight can also help executives make strategic and operational decisions.

> accenture

High performance. Delivered.

• Consulting • Technology • Outsourcing

Predictive model implementations in the spotlight

Leading Insurers are leveraging predictive modeling implementations to build and sustain competitive advantage.
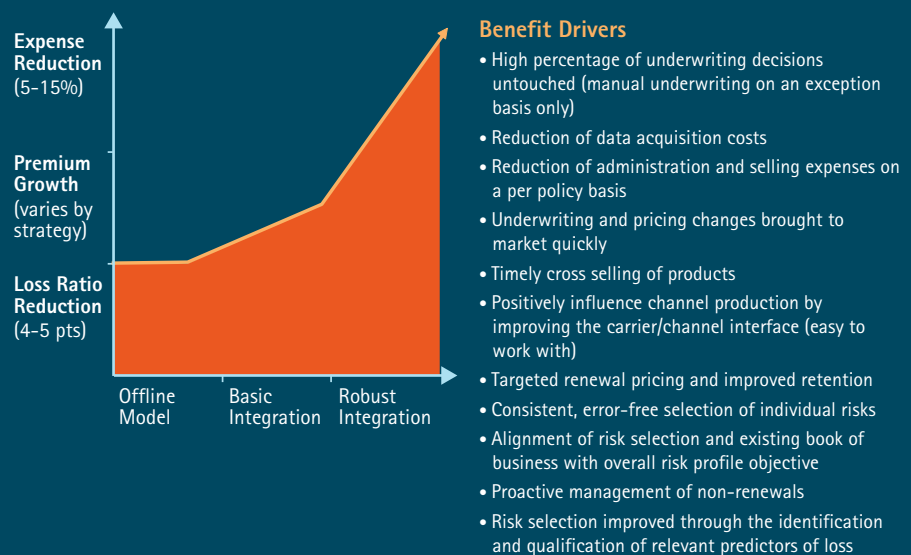
- Insurance business leaders are spotlighting predictive modeling investments with investors, as a key to high performance.

- Predictive modeling tools are enabling leading insurers to improve the quality and consistency of underwriting decisions.

- Insurance executives are deriving vastly improved account and book level insights from predictive modeling implementations.

- Leading insurers are leveraging predictive modeling to process 80-90 percent of commercial and 98-100 percent of personal lines business on an automated underwriting platform.

Getting the most out of predictive model implementations

While P&C companies are consistently realizing **loss ratio** benefits, many substantially miss out on the broader **premium growth** and **expense reduction** benefits to be derived from predictive modeling investments. This unfortunate reality is due to the nearly exclusive emphasis that many companies have placed on the predictive models themselves. For those companies who are proactive to consider how well integrated the predictive modeling solution is, so as to capitalize on process **automation** opportunities, promote **speed of change** as models are updated, and provide **flexibility** to adapt and apply the predictive score more broadly, the additional uplift potential is significant, as is illustrated in Figure 1.

Figure 1. Typical predictive modeling benefits for P&C Underwriting*

Expense Reduction (5-15%)

Premium Growth (varies by strategy)

Loss Ratio Reduction (4-5 pts)

Offline Model | Basic Integration | Robust Integration

Benefit Drivers

- High percentage of underwriting decisions untouched (manual underwriting on an exception basis only)
- Reduction of data acquisition costs
- Reduction of administration and selling expenses on a per policy basis
- Underwriting and pricing changes brought to market quickly
- Timely cross selling of products
- Positively influence channel production by improving the carrier/channel interface (easy to work with)
- Targeted renewal pricing and improved retention
- Consistent, error-free selection of individual risks
- Alignment of risk selection and existing book of business with overall risk profile objective
- Proactive management of non-renewals
- Risk selection improved through the identification and qualification of relevant predictors of loss

*Benefits are further enhanced as predictive modeling is integrated into other business functions

How Accenture can help

Accenture is an experienced service provider. We have worked with our clients to speed their initial predictive modeling implementation and establish a robust integration platform. Drawing on our deep insurance industry experience, management consulting and systems integration services, we help our clients to:

Establish a clear vision.

This includes integrating predictive scores to automate and/or enhance business processing, with clear business explanations of the scoring results, and extending the use of predictive scoring information into broader areas.

Develop a thoughtful design.

This can include using a flexible, rules-based solution and a scalable service-oriented architecture to promote adaptability and speed the implementation of future changes to business rules, results explanations, and the predictive scoring itself.

Execute a coordinated delivery.

This includes a clearly defined roll-out strategy, cross-organization training, and a stakeholder communications plan. We can also provide an offshore delivery model and parallel tracks for development and testing.

Accenture's experience in predictive model integration has helped our clients conquer the most common challenges to delivering and sustaining high performance through predictive modeling investments.

Objective	Common Challenges	Results with Accenture
Speed to Integrate New Models	• Scoring engine not flexible enough to adapt to new model structures • 9-18 months lead time to integrate new model structures	• Flexible scoring engine requires minimal or no new development to adapt to new model structures • 2-6 months lead time to integrate new model structures
Efficient Use of Third-Party Data	• Third-party data not cleanly matched to internal data • Data refresh, scrubbing, matching, storage, and utilization options difficult to navigate	• Cohesive data integration and utilization • Automated matching with configurable accuracy/exception thresholds • Thoughtful, guided decisions on all key points of consideration
Effectiveness of Business Rules	• Rule requirements difficult to crystallize • Rules architecture not well-defined • Rules quality/completeness not validated • Rating and underwriting rules not well aligned to leverage predictive model scoring	• Clear, timely and consistent rule requirements • Flexible and effective rules architecture established quickly • Rules consistently managed to the highest quality throughout their life cycle
Adoption of Business Change	• Business process and organization changes not aligned with either the model design or integration, and are difficult to agree upon • Timely and appropriate communications and training are lacking	• Business changes clearly aligned with both model design and integration via structured collaboration throughout implementation • Leadership and key stakeholders are informed and aligned from early on

For more information

Shabbir Bahrainwala
Senior executive
Accenture - Financial Services
+1 312 693 0498
s.e.bahrainwala@accenture.com

Jaden W. Mosier
Senior manager
Accenture - Financial Services
+1 614 629 2415
jaden.w.mosier@accenture.com

www.accenture.com/predicitiveanalytics

About Accenture

Accenture is a global management consulting, technology services and outsourcing company. Combining unparalleled experience, comprehensive capabilities across all industries and business functions, and extensive research on the world's most successful companies, Accenture collaborates with clients to help them become high-performance businesses and governments. With approximately 177,000 people serving clients in more than 120 countries, the company generated net revenues of US$21.58 billion for the fiscal year ended Aug. 31, 2009. Its home page is www.accenture.com.