



Robust analytics give P/C insurers new insights on customers, risks and business cycles.

Call it the “arugula effect.” A major U.S. commercial insurance carrier was dissatisfied with how it assessed general liability risk for supermarkets. The conventional lens on customer segments was too crude and masked the presence of good risks within broad segments such as inner-city supermarkets.

So the carrier mined geographic data block by block and discovered a sub-segment of stores that had a more attractive risk profile: The stores in this group made more than one-third of their sales from fresh produce such as arugula, did not use drop-down security gates and were each located within two blocks of a health club and a 24-hour parking garage.

By targeting such stores with more

favorable pricing and eliminating cross-subsidies, the carrier realized a 4% improvement in its combined ratio—big money in an industry with tight margins.

Almost all property/casualty insurers today have at least rudimentary analytical capabilities, but they tend to be confined to an actuarial group using traditional loss and underwriting data, and focus narrowly on how loss prediction can improve pricing.

High-performing firms, by contrast, take an approach that’s both more expansive and practical. They find meaningful linkages between claims and measures of personal responsibility, looking beyond actuarial data to uncover new data sources outside insurance, from divorce filings to records of smoking behavior and magazine subscriptions. They draw up a reasonable hypothesis, test it using the best data that’s quickly available and put the analytical insights into operation. They regularly gather customer comments and loop them quickly to frontline employees and managers, who can then make adjustments in underwriting, pricing, claims and other areas.

Most of the analytical advances to date have come in personal auto

Key Points

- ▶ **The Situation:** Many P/C insurers use their analytics in rudimentary ways.
- ▶ **The Upshot:** Leading firms link outside and inside data to develop powerful underwriting and marketing tools.
- ▶ **What’s Ahead:** More insurers will discover new ways to use analytics for better risk management, pricing and capital utilization.

and small commercial lines, where losses are frequent and relatively low on average. The performance leaders over the next few years will extend these techniques to areas such as workers’ compensation and homeowners insurance, where losses generally are less frequent but larger.

Five Target Areas

The leaders in this field are using advanced analytics to improve business decisions in five areas:

Risk selection and pricing. Companies are finding new correlations between target customer segments and risk. Progressive Insurance, for instance, combines individual customer data with behavioral science techniques to nudge people to do the right thing, thereby lowering the overall level of risk in its portfolio. Its Snapshot program deploys telematics to gather information about how and

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how much an individual drives in order to target discounts accurately at careful drivers and charge more spirited drivers an appropriate higher premium.

Analytics can improve the profitability of a carrier's customer mix through a robust adverse selection strategy: actively targeting high-profit potential customers with attractive pricing; and by repricing the existing book, driving the worst risks to competitors.

Customer loyalty and advocacy. A different type of data is being used by some P/C insurers to raise the level of advocacy among customers. They track how customers perceive the company and its products, sorting customers as promoters, passives, or detractors to produce a net score that monitors the quality of customer relationships. Based on customer feedback, they make changes to processes that influence the customer experience.

The business payoffs from customer advocacy are substantial: Bain estimates that the lifetime profit from a new policyholder in auto insurance

averages \$537 for a promoter, more than five times the \$100 profit for an average detractor.

The incremental value stems mostly from greater retention plus word-of-mouth recommendations and a minor boost from cross-selling opportunities. (See Figure 1.)

Brazil-based Porto Seguro has consistently ranked first in customer loyalty among auto insurers in that market. The company has used analysis of customer feedback to improve front-line customer service and to create innovative offerings that both delight customers and improve the company's economics.

For instance, Porto Seguro offers policyholders free mechanical check-ups, which improve safety. Before third brake lights were the industry standard, the company offered them free to customers as a way to reduce loss ratios. It determined that customer discounts for parking garages, to discourage parking on the street, positively affected both loyalty and loss ratios. The company also offers free locksmith, plumbing and electrician services to propel sales

of a residential assistance package added to auto insurance.

High customer loyalty, and the astute use of customer feedback to craft new offerings, have contributed to Porto Seguro's strong performance relative to competitors in revenue growth, loss ratios and return on capital over the past five years.

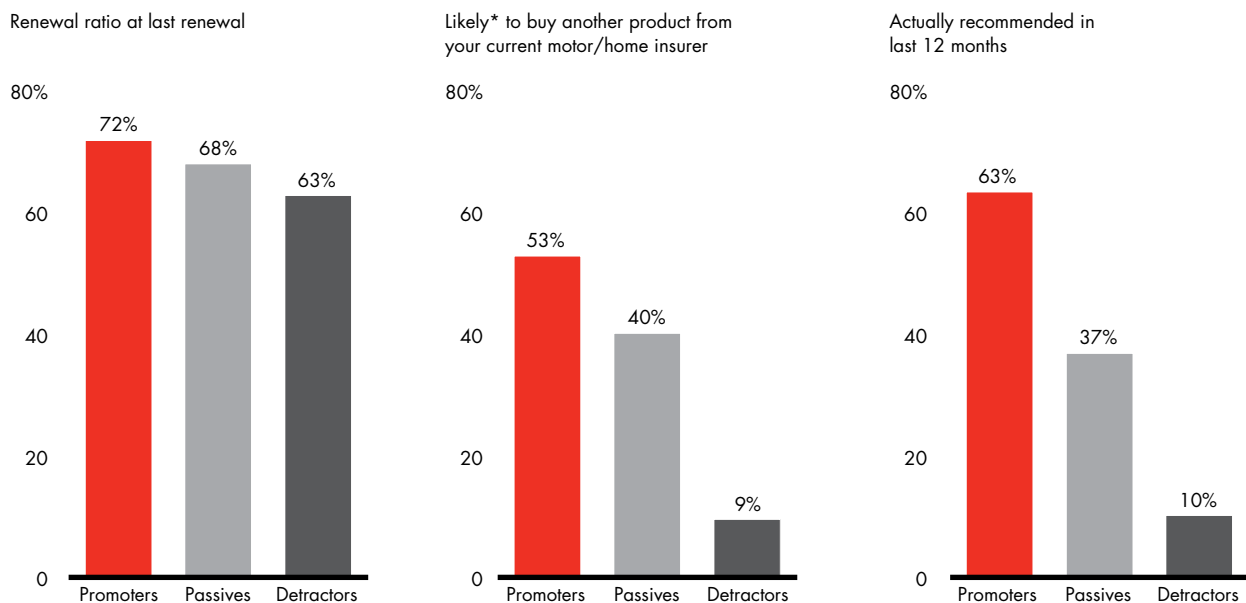
Claims management. How a carrier interacts with customers to handle claims stands as a key moment of truth. Among certain P/C lines, Bain & Co. has found that claims management is the area with the greatest potential to annoy or delight customers. (See Figure 2.)

Analytics can help strengthen claims management by devising smarter segmentation of customers and their predicted behavior (through latent class-regression modeling) and more accurate prediction of the likelihood and timing of relevant events (through hazard modeling). These scientific methods raise one's confidence about the projected frequency and amount of claims. They're increasingly relevant as one moves to more complex types of claims.

Figure 1

Happy Campers

Satisfied insurance customers renew and recommend at higher rates than dissatisfied clients.



*Rating of 7 to 10 out of 10
Source: Bain/Research Now UK Motor and Home Insurance NPS Survey, October/November 2010 (n=4,936)

Equally important is how well customers are managed through the claims process. Some leading companies are giving customers a greater role in the process, such as encouraging drivers to shoot photographs of their auto accidents on their smartphones and to email those pictures from the scene.

Management of business cycles. Some carriers capitalize early on cycle-driven opportunities. They use analytics to identify niche markets that buck the general trend, or they anticipate and act on turns in the cycle sooner than competitors do. In personal home insurance lines, one region might continue to have a hard market while other regions' markets are softening.

W.R. Berkley, one of the largest underwriters of commercial insurance, is also one of the most flexible because of how it manages cycles. Berkley allows each of its dozens of subsidiaries in the United States and abroad to make pricing decisions and respond quickly to local customer needs, within preset risk parameters. That decentralized

approach makes Berkley more nimble than competitors that centralize pricing, helping it to expand across geographies and niche specialty segments such as life sciences. Over the past decade, Berkley has been among the most consistent outperformers in its combined ratio and growth in direct premiums written.

Capital efficiency. Analytics also can be a powerful tool in the CFO's arsenal to better manage capital. This dynamic plays out in a couple of ways. Analytics can strengthen customer loyalty, as discussed earlier, which reduces customer lapses (churn) and volatility; in turn, that lowers economic capital requirements and therefore raises the return on capital. Estimates by Bain and Towers Watson for one European insurer showed a 1% reduction in internally modeled solvency capital requirements with a 10% reduction in the volatility of lapses.

In addition, analytics helps executives determine the likelihood of different risk scenarios for a line of business. Analysis, say, of a concentration of real estate coverage in a particular region

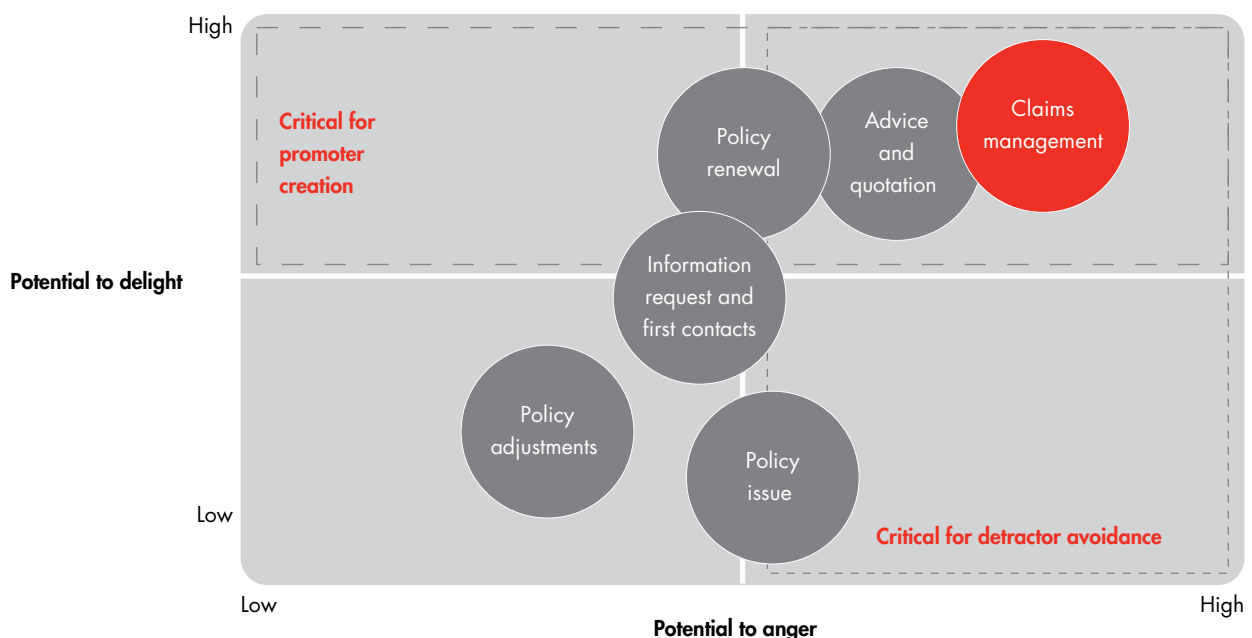
will reveal whether that region's claims are more volatile, or less, than others, and whether it correlates with losses in other regions and so on.

Products and segments with the same combined ratio can have different returns on risk-adjusted capital, given the characteristics of the risks and the insurer's portfolio. ITAU, the leading P/C insurer in Brazil, uses return on risk-adjusted capital as a competitive advantage, the company notes in a 2011 Securities and Exchange Commission filing, because that gives it a more precise measure of risk versus return and capital allocation. Other companies that choose to rely on simpler metrics, such as combined ratios, might end up on the wrong side of adverse selection.

By advancing in each of the five areas, carriers can expect to improve their combined ratio by 3% to 5% and their annual revenue growth by 5% to 15%. The leaders will have a head start as data continues to pour into the industry. Moreover, advanced analytics will only grow more useful as the volume and types of data continue to proliferate in the future. **BR**

Figure 2
Make or Break

Claims management is the biggest reason why insurers please or displease their customers.



Source: Bain & Co. client example