

SOCIETY OF ACTUARIES

Article from:

News Direct

January 2005 – Issue 49

SEPARATING THE WINNERS FROM THE LOSERS

BY VAN BEACH

he New York Yankees had a winning year again this year, but not every baseball team has the deep pockets of owner George Steinbrenner. For teams with fiscal limitations, Billy Beane, the general manager of the Oakland A's, is changing the way players are selected and teams are constructed. Beane believes that there is great value to be gained by analyzing baseball statistics when evaluating a player's potential. He believes that by using technology to collect, refine and analyze baseball data on hits, steals, runs, outs, etc., the A's can better determine the relative value of players. He believes that the ability to leverage the combination of technology and data will separate the winners from the losers. Three division championships in the last four years provide evidence that he is probably onto something.

The simplified issue life insurance market may experience a similar change. There are new data sources that have great potential to improve the evaluation of the life insurance risk. There are companies that believe technology can be applied to extract value from these data sources and their experience data to give them a competitive advantage. It seems likely that in the simplified issue market, the ability to leverage the combination of technology and data will separate the winners from the losers.

A Game Changer

Prescription drug profiles, (a history of the prescription drugs that a person has purchased), will change the way life insurance is underwritten and sold. Prescription drug profiles can now be retrieved for over 70 percent of life insurance applicants (this percentage is greater than 90 percent in some geographic areas). With the application of technology, these profiles can be automatically requested, received electronically and evaluated intelligently to produce the equivalent of an underwritten application – without ever crossing an underwriter's desk.

Consider the potential for a technology-enabled, simplified-issue term life insurance product, where



prescription profiles are incorporated as part of the risk-screening process. The information gathered through the application is limited to the typical questions, but behind the scenes a prescription profile is obtained electronically, and the contents are combined with the standard responses. Through the electronic interface that obtains the prescription profile, the data is obtained almost instantaneously and for only a marginal fee. The results are combined with the standard responses and an intelligent underwriting system derives an underwriting decision automatically. The protective value of the prescription information allows the policy to be issued at a significant discount compared to the regular simplified issue product. The applicant gets a simple product that meets his/her needs, a very quick, transactional response and a rate that previously was unobtainable without being fully underwritten.

The New Playing Field

The introduction of a game-changing product like the technology-enabled prescription product described above will have an impact on all players in the simplified issue market. Consider two identical companies, "Early" and "Late." Both companies sell the same simplified-issue product to the same market using the same risk-screening criteria for the same price. Assume that the insured population consists of 90 percent true standard risks and 10 percent "cheaters" – substandard risks that provide inaccurate responses to the risk-screening questions. On average, each company gets an equal mix of the standard risks and the cheaters.

| CONTINUED ON PAGE 14 |



Van Beach, FSA, MAAA, is a senior consultant at Milliman STEP Solutions in Fort Washington, Pa., and a member of the Nontraditional Marketing Section Council. He can be reached at (507) 533-8400 or at van.beach@ milliman.com.

| WINNERS AND LOSERS ... CONTINUED FROM PAGE|13

Now assume that Early Company introduces the simplified-issue product described above at a price that is 20 percent less than the equivalent "regular" simplified issue product that is still being sold by Late Company. The prescription profiles allow Early Company to identify the cheaters and as a result, all insureds are true standard risks. Given an efficient market, all of the true standard risks will buy a policy from Early company because they will be able to get a 20 percent discount as compared to Late Company. Late Company is left with all the cheaters.

Experience allows companies to recognize and react to trends to minimize mistakes and capitalize on opportunities.

Whether Late Company is a winner or loser will depend upon how quickly the change in the market can be identified and addressed. The ability to react will be driven by the experience data that Late Company collects and analyzes. Early Company also needs to collect, analyze and react to the experience data. Suppose it was assumed that the protective value of the prescription profile would result in a 20 percent discount, but the actual discount is only 10 percent. Whether Early Company is a winner or loser will also be determined by its ability to identify and address the mispriced discount.

The Foundation of a Winner

Data is the foundation for the analytics that Billy Beane utilizes to give the A's an advantage. Data is also central to the prescription drug product and the experience analysis described in the example above. However, there are three key points to remember with regard to data: 1) The value contained in data is only realized by analyzing the data and applying the insights that are gained. 2) The value of the analytics is limited by the quality of the data. 3) The analysis of the data and the application of the insights must be done efficiently or the costs associated with using the data will outweigh the value derived. For an insurance company, the value that can be extracted from data is driven by the company's technology and systems (new business, administration, claims, etc.). A company's systems will determine what data is collected, how the data is stored, and how the data is used. For example, prescription drug profiles will be underutilized and value will be lost if the request for the profile is not operationalized by the new business system into the underwriter's workflow. If the profiles are difficult or time consuming to retrieve, the value of the data is diminished by the effort required to obtain the data. If the prescription drug profile is not captured and stored electronically with the policy record, then the prescription data cannot be used later in experience studies. If the underwriting, premium or claim data that is captured is incomplete or inconsistent, it will be difficult for the company's actuaries to derive accurate insights from experience data. Strong technology and systems will completely, consistently and efficiently gather, capture and apply all relevant information. By utilizing technology, the value of the data is maximized.

Companies That Win

The companies that will win will be those that best leverage the combination of technology and data. Technology can be applied to ensure that all experience data is collected completely, consistently and efficiently. This will allow a company's actuaries the best opportunity to derive insights and add value by analyzing and acting upon experience. Experience allows companies to recognize and react to trends to minimize mistakes and capitalize on opportunities. Technology is also the key to the efficient and effective use of data, whether it is prescription drug information or data from other sources. Harnessing the value of data for use in risk assessment can be a source of significant competitive advantage. Your company may not have the financial resources to assemble a team in the same fashion as the Yankees, but by making smart investments to leverage technology and data, companies with smaller budgets can still play like the Yankees – and win. ▶