Ledger-Enquirer.com
COLUMBUS AND THE VALLEY'S HOME PAGE

Posted on Mon, Aug. 22, 2005

Marketers tap software that predicts consumer behavior

By Jon Van
Chicago Tribune

CHICAGO - Quietly working in the background, today's computers can spot insurance fraud, thwart shoplifters and lure racing fans to spend more at the track.

With uncanny accuracy, computers predict behavior by sifting through mountains of data about customers collected by businesses. Called predictive analytics, this automated crystal ball gazing has become a $2.3 billion industry in the United States and is on track to reach $3 billion by 2008.

``It's gotten so important because the stakes have risen,'' said Robert Blumstein, an analyst with IDC, a marketing intelligence firm that predicted the growth.

``When nobody did it, it didn't matter much,'' he said, adding that there are hundreds of firms -- large and small -- marketing software to track customer patterns. ``But if your competitors use this to fight for customers and you don't, you'll be at a real disadvantage.''

The software can be downright spooky, as when it singles out a group of customers likely to crave a new product they have not even heard of.

``When these consumers receive a targeted marketing offer, it leads to the eerie feeling of marketers `knowing what I want' or `making me buy something,'" said Amar Cheema, assistant marketing professor at Washington University in St. Louis.

The technology's power was demonstrated recently at Arlington Park racetrack where marketers targeted specific segments of their clientele, offering bonuses crafted to appeal to each customer's preferences.

Information about past buying habits was gleaned each time customers swiped loyalty cards through a reader as they made purchases.

Keith Darby, Arlington's senior sales and marketing director, said the information enabled the track to identify hard-core racing fans who like

placing bets and those who are more interested in the track's entertainment aspects, such as musical events.

The track's direct-mail ads offered discounts and other inducements tailored to each customer's taste, Darby said. In May, the track's revenue from members of its Twin Spires Club totaled about $1.5 million, he said, up significantly from the $900,000 the same group of customers spent in the year-earlier period.

Drawing that extra $600,000 was not simple, said Atique Shah, technology solutions vice president with Churchill Downs, Arlington's parent corporation.

``We had 450 million transactions and 122 attributes to look at,'' Shah said. ``This helps us to manage millions of customers, serving each customer one at time.''

The great advantage of predictive analytics -- and what helps make its return on investment relatively high -- is that it can ``unlock value from all that data (companies) have been collecting over the years,'' said Rebecca Wettemann, vice president of Nucleus Research.

The software looks at past transactions, such as purchases, and it can factor in consumer attitudes expressed in surveys. General census information and demographics research may also be included.

``There are patterns in the data that a human might see,'' said Jack Noonan, chief executive of SPSS, a Chicago-based pioneer in predictive analytics. ``But the data are so massive, it would be impossible for humans to just view it all once, let alone analyze it.''

SPSS has been in business since 1968, starting as a service to academic researchers. Many of the basic statistical analysis tools haven't changed greatly over the years, Noonan said, but the ability to use those tools has improved significantly.

``It used to be that 85 percent of an analyst's time went into organizing the data, and 15 percent was devoted to actual analysis,'' Noonan said. ``Now that's reversed.''

SPSS' clients include some of the nation's major cell-phone operators. While he declined to disclose their names, Noonan said one carrier has been particularly adept at using predictive analytics to single out customers likely to switch to another carrier.

This knowledge enabled the carrier to offer those customers sweeter deals -- such as free phones or extra minutes -- to renew their contracts. The carrier

reduced customer churn by 25 percent, Noonan said, while others haven't been as effective in their execution.

A smaller Chicago analytics firm, Apollo Data Technologies, helped a bookstore chain improve inventory control of classic books.

``A bookstore needs to stock certain classic works, such as `Alice in Wonderland' or `Tale of Two Cities,' '' said Jeff Kaplan, Apollo's principal and co-founder. ``There's not much demand for these titles, but it is steady. So you want to have one or two copies of each available.''

With greater than 80 percent accuracy, the predictive software tells the chain which classics are likely to sell out in certain stores in the next few weeks so new ones can be ordered and stocked.

While predictive analytics can be a powerful tool for companies, it is not something that will always work using off-the-shelf software, Kaplan said.

``We start with software building blocks and put together a solution for a client as opposed to taking an off-the-shelf program and redoing it,'' said Kaplan, whose privately held company with 15 employees is on target to do $4 million in business this year.

While sales and marketing managers have been among the first to embrace predictive analytics, the technology can find applications throughout an enterprise, Noonan said.

One emerging application is with the insurance industry, where managers routinely suspect that up to 15 percent of claims may be fraudulent. Predictive analytics can spot the most likely fraudulent claims as soon as they are filed, Noonan said.