

Litigation Management

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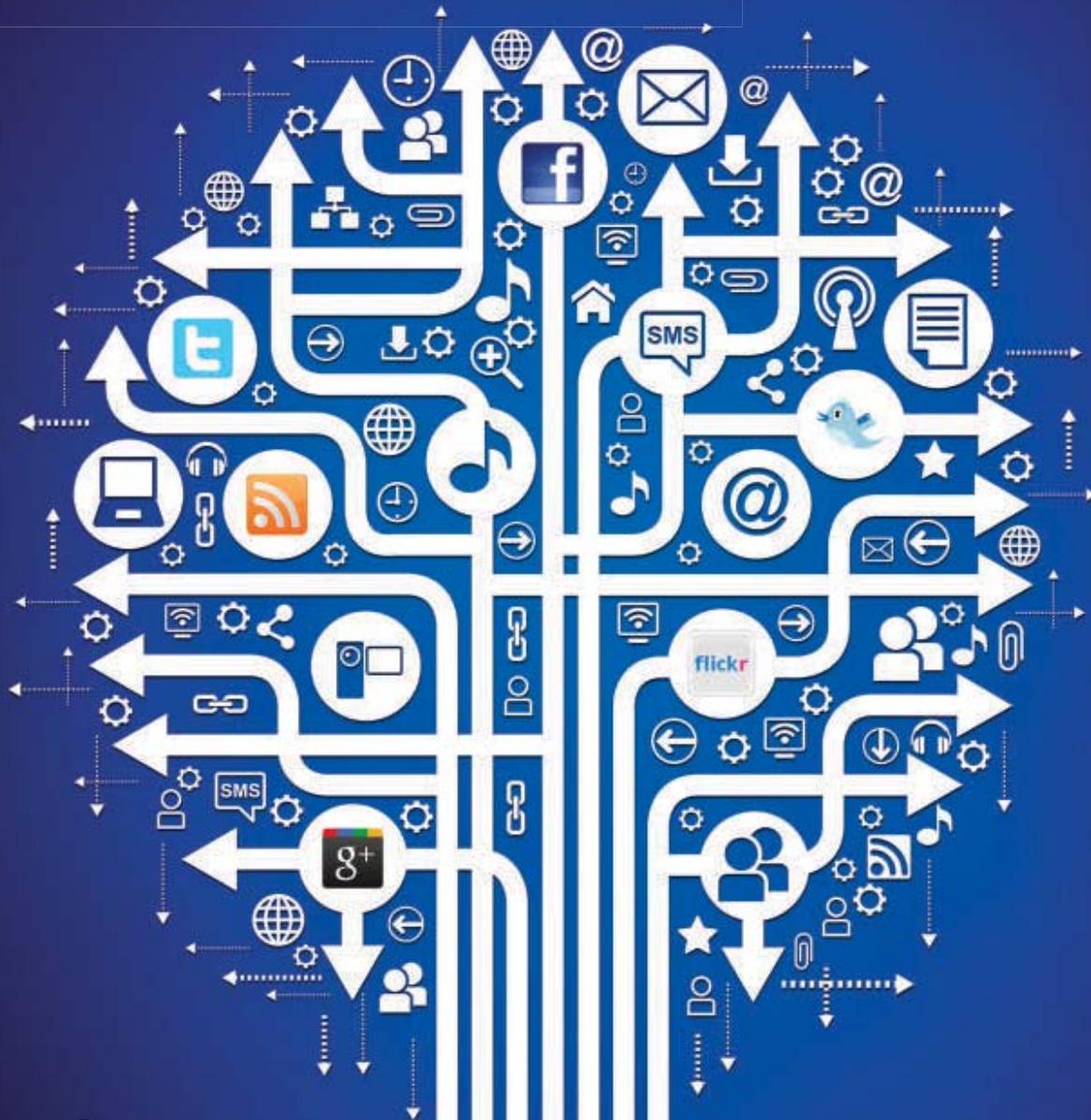
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It's Time to Mine

Using Predictive Analytics in Litigation Management

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We have heard a lot about predictive analytics over the last several years, but what is it really? Predictive analytics is the analysis of data through statistical or mathematical techniques that results in meaningful relationships being identified in the data. These results can then be used for better prediction of future events and better decision-making.

This definition may not appear to be new since it is what mathematicians and scientists have been doing throughout history to advance human knowledge. Business leaders have been using analytics to gain competitive advantage for many years. Indeed, the insurance industry may be the earliest adopter in applying predictive analytics given that one of the

oldest examples is the use of mortality tables to price annuities and life insurance policies dates back to the 17th century. However, the new features about today's modern predictive analytics include the scale, depth and wide range of information available for the analysis. Combining the wide range of information with the fast development in computation technology, data storage capacity and statistical modeling techniques, allows the modern predictive modeling to perform large-scale multivariate analysis. Multivariate analysis looks not only at individual correlations but how different relationships affect one another.

Banking and credit card industries are well known to be the leader in the use of modern predictive analytics to assist in credit card fraud detection. If you've had a credit card



stolen, you might have been amazed at how fast the credit card company identifies the different buying pattern and alerts you. That is the beauty of modern predictive analytics. Learning to correlate not only your buying patterns, but also those that occur after someone has stolen a card. Marrying the two has allowed the credit card industry to manage fraud differently.

Applications in Workers' Compensation

When it comes to workers' compensation program management, it is well known that the Pareto principle, or the 80-20 rule, consistently appears in workers' compensation loss portfolios. This is the concept that a vital few claims, the 20 percent, will drive the majority, the 80 percent, of the program cost. Most of the claims in that 20 percent category will not be catastrophic. More likely they will be mixed within the large inventory and will creep in value. Their durations will slowly become longer while their costs grow higher. Being able to predict the high value claims as close to the onset as possible and manage these claims differently out of the gate is the key.

With today's modern predictive analytics, multivariate models can consider simultaneously how various types of risk characteristics of a claim, for example, age, gender, employment type, work hours, injury type, injury time, etc., affect the outcome of an injury claim severity by assigning appropriate

weights to each of the risk characteristics. Well and carefully designed claim models with 20 to 50 risk characteristics have been successfully developed and deployed over the last several years in the industry by several insurance companies and self-insured organizations. The models have proven to successfully predict more complex and costly claims.

Models can be built by using data acquired at first notice of loss along with external data (such as unemployment rates, worksite information for the policyholder, crime rates, etc.) to effectively forecast outcomes for individual claimants. Such a model can transform claims management by improving the allocation of claim's resources, increasing efficiency, improving the estimates of claims severity and reducing claim's cycles. Companies that begin to successfully integrate predictive modeling today may find that in 12, 24 and 36 months they will have learned things from their individualistic experience and will likely be ahead of those companies that wait. As in the fraud models, behavior is always changing. Building on the knowledge in the model everyday significantly can increase the accuracy.

However, the true savings doesn't come from the model itself, but in the proper use of the information that the model produces. In modeling workers' compensation, early identification of the vital few allows the opportunity for better

management of those claims. The goal of any good workers' compensation program is to control the components that you can to the best outcome for the employer and the employee, keeping costs down.

Litigation Management Applications

A growing challenge for claim management is litigation. Claim managers struggle to strike the right balance between efficiency and effectiveness of the litigation management process. It is not beneficial if reduction in legal expenses leads to larger indemnity payouts. Predictive modeling can help litigation managers allocate the right case to the right law firm at the right price. Applying modeling to litigation management can help reduce the total legal cost while maintaining or even improving the quality of litigation results.

If defense counsel is consulted or obtained early where there is a prediction of significant severity, counsel can direct the investigation and begin the discovery process. In addition, the process of formulating a defense strategy can begin at the earliest stages of the claim so as to mitigate the loss and to ensure corporate goals and philosophies in dealing with injured workers are properly integrated into the process. This allows the legal team to be used for strategy and not just facilitation through a legal process. Litigation of a claim requires numerous decisions to be made throughout the litigation process. These decisions are often made based upon gut instinct, anecdotal evidence or simple prejudice of thought. Predictive analytics in litigation can allow a greater chance of success than the anecdotal approach currently utilized.

For instance, in selecting a medical expert one should consider the evidentiary weight that the judge assigned has historically given to the selected expert's opinion. Other variables to consider are the injured worker's attorney's success rate at trial with the particular judge assigned, opposing counsels propensity to settle versus try cases, and if settlement is historically preferred, at what stage of the litigation process does it occur. Today's technology can offer you the opportunity to create a more "experienced team" through predictive modeling. Now with the proper modeling you can put that experience at the front of line. Leaving that very limited time that is available to the people working the claims, from adjusters to attorneys, to design strategies to mitigate costs.

Future of Predictive Analytics

The claims and litigation management industries have been building and improving predictive modeling significantly

over the last decade. Insurance companies and third party administrators have built vast workflows to capture data for both management and underwriting. While there is an opportunity to develop models to help benchmark, predict and better manage litigation. One of the key issues is anticipated to be the availability, collection and sharing of data.

The legal community has long captured data in a much different way than the adjusting community. Attorneys are working through very elaborate legal systems and complex processes. They communicate this information in great detail often through emails and letters. Due to this fact, the level of technology for gathering and trending data has not been a concern for law firms. Their concern is the workflow of the legal process, not data mining. The time is coming for the legal community to understand and partner with administrators, insurers, claims and litigation managers. It is also time for the insurance community to seek out forward-thinking law firms that do not have to be convinced of the value of analytics for increased efficiency and improved outcomes.

As insurers and employers are embracing predictive analytics, so should the legal community. The mining of relevant information from a statistically significant data base is crucial to increasing the likelihood that litigation decisions can truly be in the best interests of the employer.

Predictive modeling provides the needed information at the beginning of the process to do better. Forming teams and partnerships using the right information to create customized models can create a competitive advantage in this rapidly changing world of technology and data. Having the right information for decision-making at the right time can address today's problems. Capturing that information over time, modifying and then building on it will solve tomorrow's problems. [LM](#)

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