

Stop Fraud Before It Starts

Semcastings' technology backs a major bank in identifying probable identity theft cases, as well as isolating bad debt and fraud

Financial fraud and identity theft are growing concerns for today's consumers. Fraud loss is a global problem that constitutes billions of dollars annually, an alarming number that cannot be ignored by financial organizations. Identity theft costs the United States over \$5 billion out-of-pocket annually, with an estimated \$48 billion in losses to businesses and financial institutions.* With losses continuously growing at 25% per year, fraud and identity theft are undermining consumer trust in financial institutions. One bank set out to regain customer confidence by attempting to identify potential fraudulent transactions before they occurred.



A Radically Different Approach to Predictive Analytics

Semcasting Model is a software solution that takes a different approach to predictive analytics. Based on patented genetic algorithms, Semcasting Model allows you to create models using hundreds, rather than tens, of variables. Since the software uses more data during the model-building process, there is a greater likelihood that subtle predictors will be found. This results in models that can outperform regression-based approaches by 10% or more.

A major bank looked to Semcasting to help it eliminate the guesswork by identifying likely fraudulent transactions before they occurred. Semcasting used its Model software build a custom model based on the bank's previously lost dollars. The software analyzed thousands of variables about the past behavior of the bank's electronic fund transfers to isolate suspicious transactions, then modeled 30 million transactions across a 14-month period and analyzed a multitude of time-series variables.

The Results

Semcastings' Model software was able to successfully identify transactions that were 276 times more likely to be fraudulent by studying the bank's transaction history. The bank had lost \$8.8 million in cumulative fraud in just a three-month window, equaling an alarming \$32.2 million in fraudulent transactions for the year. Semcasting was able to isolate 85% of fraud dollars in 0.2% of the transactions; every transaction in the isolated group represented approximately \$93 in fraud.

The Model software proved that fraud dollars are generally whole dollar amounts; it also showed that certain times of the day pose a greater risk for fraudulent transactions. Finally, the software was able to analyze hundreds of variables that assist in detecting fraud patterns to provide guidance so financial institutions can combat this type of transaction, in turn saving millions of dollars.

**Source: FTC identity theft survey report*