

# INSURANCE FRAUD



**You know there are fraudulent claims.  
Let's find them now.**

Using predictive modeling to increase  
bottom-line profitability.

“WE’RE FINDING NEW SUSPICIOUS CLAIMS THAT WOULD NOT HAVE BEEN REFERRED TO THE SIU IN THE PAST, IDENTIFYING SUSPICIOUS CLAIMS EARLIER IN THE PROCESS, WITH LESS PAYMENTS OUT THE DOOR.”

Project Lead, from a property and casualty insurance company

**Increased fraud shrinks profitability**

It has been estimated that fraudulent claims cost the property and casualty insurance industry billions of dollars annually.

The National Insurance Crime Bureau (NICB) calls fraud the “second most costly white-collar crime in America behind tax evasion.” The residual effects of fraudulent insurance claims are felt not only by individuals and companies who see rising premiums, but also insurance companies like yours who are continually experiencing greater pressure to reduce overall claims expenses in order to increase the bottom-line.

The increasingly high prevalence of fraud is one of the main contributing factors driving up the combined ratios of insurance companies today. Fraud rates used to be in the low single digits and were viewed as “the cost of doing business.” Now that fraud rates are climbing into the double digits, insurance companies are looking for new approaches and technologies to reduce this costly expenditure.

**It’s time to find – and stop – the fraud**

Like most insurance companies, you most likely have some sort of system – whether it’s a rules-based manual process or a rules engine application – that attempts to identify fraudulent claims.

Your current systems may catch some of the fraudulent claims, but typically not enough of them. Nor can these systems catch them early enough in the process to be able to take actionable steps to reduce or recover the losses. The subtle nuances of fraud have become increasingly complex and well-executed fraud schemes are constantly and rapidly evolving. Essentially, it’s almost impossible for traditional business rules and human judgment to keep ahead of the fraudsters, as is evidenced by increasing loss ratios.

Smart insurance companies are adding predictive modeling and advanced analytics to their arsenal of fraud-prevention tools and discovering significant results, often finding new types of fraud that were previously undetected. Maybe it’s time for your company to do the same.

**Why predictive modeling?**

When applied to the property and casualty insurance industry, predictive modeling uses the latest advances in analytics to detect fraudulent patterns in large volumes of data residing in databases, claims management systems and third-party data sources. Predictive modeling can considerably reduce the amount of claims paid out each year, with millions of dollars in potential savings. This is because predictive modeling not only flags claims that have easily identifiable fraud characteristics but also detects previously un-identifiable fraud variables much earlier in the claims process than was possible with manual processes.

**Featured StatSoft Products**



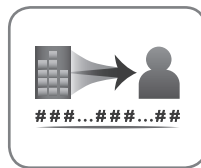
**STATISTICA Enterprise** – The server platform for delivering analytic and business intelligence applications to departments and divisions within the enterprise via centrally-managed queries, analysis templates, report templates and dashboards.



**STATISTICA Data Miner** – The most comprehensive selection of data mining solutions for the enterprise, with powerful model development and deployment (solution publishing) tools and database/data warehouse integration. Optional solution packages for specific applications and domains.



**STATISTICA Text Miner** – A large selection of retrieval, pre-processing and analytic/interpretive mining procedures for unstructured text data and webpages. Optional specific solution packages.



**STATISTICA Live Score** – The server platform for integrating predictive modeling into business processes and line-of-business applications through highly-efficient, real-time scoring via predictive models managed using STATISTICA Data Miner and STATISTICA Text Miner.

For instance, your company has both data and expertise from past claims that can be used by predictive modeling to intelligently identify fraudulent claims early and often. You can use structured and unstructured data from your existing and past claims, such as notes from adjusters, medical claims information and more, plus policies, customer data and industry resources like the NICB to immediately decrease fraudulent claims payouts. To increase the overall productivity of your claims processing even more, predictive modeling can then help you improve your underwriting, subrogation, recovery and reserve-estimating functions through greater timeliness, accuracy and efficiency.

In combination with sophisticated data and text mining techniques, predictive modeling tools can also help you discover previously undetected patterns and trends. This helps identify claims with the highest propensity for fraud and uncover new types of fraud that you never would have discovered through a manual, linear or rules-engine based process.

## Take control of your bottom line

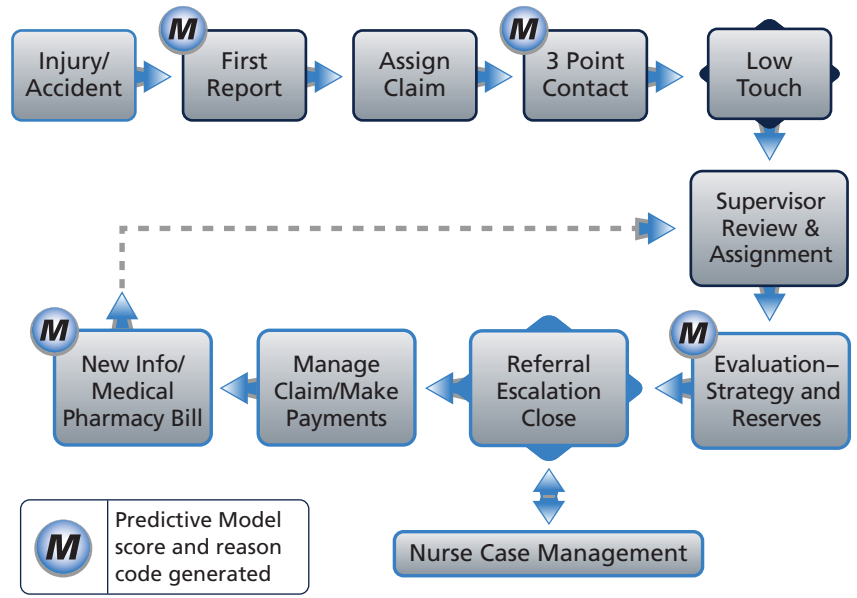
StatSoft's Predictive Claims Flow™, a predictive analytics and reporting solution for property and casualty insurance companies, can help you reduce loss ratios and improve bottom-line profitability, often within a few months of implementation.

StatSoft's Predictive Claims Flow™ solution incorporates predictive modeling at every stage of an insurance claim. This closed loop system has a unique scoring system that rates each claim at its inception on its propensity for fraud and then continually rescors the claim as it goes through each step of a claim's lifecycle.

Using already-established fraud flags, plus intelligent variables that predictive models create, fraud scores are re-calculated every time a new piece of data is submitted, whether it's a verbal update from a claimant or a medical bill submitted by a vendor.

Based on fraud probabilities, StatSoft's solution then determines the right level of servicing for the claim, including whether or not the claim should be assigned to a more senior adjuster or if there is a need for in-person-contact in order to reduce the overall duration of the claim. At the same time, predicted reserve estimates are updated and opportunities for subrogation are identified.

## Predictive Analytics can drive down claim costs at many points across the claim lifecycle



## Can you add millions to your bottom line?

According to the NICB, "Insurance industry studies indicate 10% or more of property/casualty insurance claims are fraudulent."<sup>1</sup>

Imagine if you could identify – and stop – even a small percentage of the undetected fraudulent claims that pass through your company each year. How much would your bottom-line profitability improve?

Here is an example of what it means to one insurance company. Take a look and then add your own data.

Now imagine if you could enjoy greater savings than the 20% indicated here.

The Impact of a 20% Additional Reduction in Fraud Claims		
	Example (in Millions)	Your Data
Annual Premiums	\$136	
Loss Ratio	52%	
Annual Losses Paid	\$71	
% of Fraudulent Claims	10%	
Annual Fraud Loss	\$7.1	
Fraud Identified by <b>STATISTICA</b>	90%	
Value of Identifiable Fraud	\$6.4	
Potential Recovery/Savings	20%	
Value of Recovery/Savings	\$1.28	
<b>Revised LOSS RATIO</b>	<b>50%</b>	
<b>ANNUAL IMPACT ON BOTTOM-LINE PROFITABILITY</b>	<b>\$1M+</b>	

When StatSoft's Predictive Claims Flow™ solution is applied across the entire claims process, you can expect these results...and more.

## Fraud Detection Plus

More and more insurance companies are discovering the power of predictive modeling. With StatSoft, you can potentially save millions in fraud detection, plus you can leverage the same sophisticated predictive analysis tools across your enterprise to help you acquire, retain and service your most highly valued customers and prospects.

- **Claims Processing.** Accelerated claims processing increases customer service and profitability.
- **Underwriting.** More efficient analysis helps determine the appropriate premiums and identifies the greatest risks.
- **Marketing.** High-value prospects are identified, with tools to effectively target them with the most meaningful offerings.
- **Sales and Service.** Sales functionality and effectiveness improves, along with an optimization of customer service

### Claims

Accelerated detection of claim severity  
Claim draft authority optimization  
Claims assignment automation by competency  
Fast tracking claims  
Predict claim complexity  
Predict reserves/draft authority optimization  
Real time fraud detection early in FNOL  
Reduce working capital

### Underwriting

Automated renewal processing  
Automated underwriting/risk selection  
Optimized discount/credit recommendation  
Predict lifetime customer value  
Retain the "better" risk  
Underwriting fraud detection

### Marketing

1:1 marketing  
Campaign optimization  
Customer segmentation  
New product market analysis/pricing  
Now market to non-fraudulent prospects  
Outbound Predictive Marketing  
Optimize leads delivered to your agents  
Real time inbound intelligent cross sell  
Spend less to obtain higher quality business

### Sales & Service

Agent/Broker Performance effectiveness  
Commission modeling and optimization  
Cross-sell, up-sell, offer optimization  
Field sales force optimization  
In and outbound Customer retention offers  
Intelligent call routing  
Smart/real time recommendations

#### US Headquarters:

StatSoft, Inc.  
2300 East 14th Street  
Tulsa, OK 74104  
Phone: (918) 749-1119  
Fax: (918) 749-2217  
E-mail: [info@statsoft.com](mailto:info@statsoft.com)  
[StatSoft.com](http://StatSoft.com)

Australia: StatSoft Pacific Pty Ltd.  
Brazil: StatSoft South America  
Bulgaria: StatSoft Bulgaria Ltd.  
Czech Rep.: StatSoft Czech Rep. s.r.o.  
China: StatSoft China  
France: StatSoft France  
Germany: StatSoft GmbH  
Hungary: StatSoft Hungary Ltd.

India: StatSoft India Pvt. Ltd.  
Israel: StatSoft Israel Ltd.  
Italy: StatSoft Italia srl  
Japan: StatSoft Japan Inc.  
Korea: StatSoft Korea  
Netherlands: StatSoft Benelux BV  
Norway: StatSoft Norway AS  
Poland: StatSoft Polska Sp. z o.o.

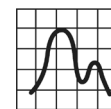
Portugal: StatSoft Ibérica Lda  
Russia: StatSoft Russia  
Spain: StatSoft Ibérica Lda  
S. Africa: StatSoft S. Africa (Pty) Ltd.  
Sweden: StatSoft Scandinavia AB  
Taiwan: StatSoft Taiwan  
UK: StatSoft Ltd.

## About **STATISTICA** and StatSoft

StatSoft, Inc. is one of the largest global providers of analytic software. **STATISTICA** is an enterprise-wide, scalable Web-enabled system that is used by a variety of industries in mission-critical applications where predictive modeling helps increase productivity and bottom-line profitability, while also helping protect life, increase safety, and save the environment.

While easier to use and more cost-effective than its competitors, **STATISTICA** is one of the most technological advanced tools in the industry, with uncompromising attention to detail and overall quality which ensures success for its users.

For two consecutive years, **STATISTICA** has been recognized as the primary data mining tool of choice in an annual survey conducted by Rexer Analytics of corporate and consultant data miners. **STATISTICA** was also recognized for receiving the highest satisfaction ratings among those surveyed.



**StatSoft**<sup>®</sup>  
**STATISTICA**