

Challenges

- **Manual claims processing.** Trying to process too many claims manually introduces not only human error, but also a high turnover of auditors, making it an unprofitable operation. The result is that many fraudulent claims are overlooked, causing loss of revenue.
- **Variable audit quality.** Auditor skill sets and experiences are different, causing fluctuating performance and loss of revenue.
- **Inability to spot patterns.** Though very skilled, human auditors are challenged to recognize patterns of fraud and errors across claims - it is just not possible to retain all the variables over time.
- **Uncertainty on what to look for.** Besides having to keep track of existing schemes, human auditors must also keep an eye toward new patterns of fraud. Business rules cover formerly learned fraud practices, but cannot guess at broad and emerging fraud schemes.

SAS® Suspect Claims Detection

Find and prevent questionable service claims

Overview

Manufacturers offering after-sale service have traditionally used business rules and labor-intensive operational processes to manage warranty claims. Manually auditing claims based on a random sample or the highest cost needlessly wastes millions of dollars to fraudsters every year. Of the roughly \$72 billion manufacturers spend in warranty claims every year, about 10 percent is consistently fraudulent; indirect costs - such as damaged brand reputation - can add \$35 billion.

Increasing staff to increase the number of claims audited is inefficient and infeasible. The majority of fraudulent claims go undetected - first, because current processes are not automated on 100 percent of claims, and second, because embedded analytics aren't being used to predict beyond yesterday's business rules.

SAS Suspect Claims Detection analyzes service claim data in near-real time to identify suspicious claims and service providers. A broad array of analytic models

The Solution

SAS Suspect Claims Detection automatically identifies suspicious service claims and service providers. It is delivered through SAS Solutions OnDemand as a cloud-based offering, where your company data is sent to SAS and analyzed, and reports are sent back that flag claims and service providers with anomalies based on business rules and predictive analytics.

- The solution applies business rules and advanced analytics against service claim data on 100 percent of claims to automatically identify, classify and surface suspicious behavior.
- Auditors are freed up to focus on investigations or the most likely areas for fraud and training issues rather than relying on simple sample audits.
- A broad array of analytic models is employed to estimate the probability of suspicious activity. This information is used to detect fraud, uncover efficiencies by improving service training, and reduce parts and service costs.

along with business rules are employed to estimate the probability of suspicious activity. Manufacturers use this information to detect a much higher level of fraud to then focus their auditors on investigations with the added benefits of uncovering training needs and reducing service costs. And with the SAS Solutions OnDemand delivery method, business results are gained rapidly with minimal IT investment distributed predictably over time.

The Approach

In tough economic times, it is increasingly important to proactively manage claims and avoid negative impact to margins with millions in fraud losses. But other vendors only provide solutions with business rule engines that look at past fraud trends. SAS' offering to detect and prevent fraud goes above and beyond the capabilities of those systems. Proactive and accurate suspect claims analysis requires predictive analytics.

SAS Suspect Claims Detection uncovers questionable claims that may be fraudulent, saving manufacturers millions in claims payments. The solution automatically identifies suspicious service claims and service providers. It allows claim processors and auditors to focus only on the most likely sources of suspicious behavior, and directly reduces service costs.

By analyzing 100 percent of service claims, SAS Suspect Claims Detection allows service organizations to conduct a more comprehensive investigation into potential fraud. The automated process scores all claims and service providers based on the probability of being suspect. The SAS Suspect Claims Detection engine then ranks the most likely sources of fraud and training issues and allows the claim processor to flag claims for audit, payment, nonpayment or short payment.

Using this solution, organizations begin to uncover unnecessary usage of parts and can then transfer that knowledge to all service providers to lower parts costs and increase efficiency. Service network improvement is another area for which claims analysis will reveal opportunities to retrain service providers on best practices.

Benefits

- **Reduce service costs.** By denying or charging back for illegitimate claims, service costs can be greatly reduced.
- **Maximize effectiveness of auditors' time.** Auditors are able to focus on the claims and service providers with the highest probability of fraud.
- **Improve service network effectiveness.** Automated claim review uncovers patterns of inefficiency where service providers can improve their performance and enhance user satisfaction.
- **Analyze and optimize parts usage.** Invariably, technicians approach a fix differently, and some use an excessive number of parts; automated analytics detects patterns of parts usage that can be utilized to retrain technicians and save parts costs.

- **Short time to implementation.** Deployed on a shareable and scalable infrastructure specifically designed for suspect claims detection, SAS Solutions OnDemand provide various options in software-as-a-service (SaaS) and enterprise hosting solutions. You'll get a flexible, outsourced application - managed by subject-matter experts - without up-front investments in IT, staff and maintenance.

Capabilities

Scoring

It's very difficult to identify fraudulent cases without investigating the facts. As a result, the time and resources needed to manually investigate claims aren't worth the effort. But even automatic screening systems have to be more intelligent than the fraud perpetrators in order to detect them.

SAS Suspect Claims Detection provides the automated means to look at 100 percent of the claims filed to detect suspicious claims. The solution does not explicitly flag any claim as clean or fraudulent; instead, it provides a score for claims and service providers that shows the likelihood of fraud, so that auditors can further evaluate them.

- **Challenge:** At a retail appliance manufacturer, service providers learned to work around rules-based flags. Auditors couldn't see larger patterns and were forced to audit randomly.
- **Solution:** SAS Analytics was used to detect suspicious claims in near-real-time. Reports sent to auditors rank claims and service providers based on likelihood of fraud.
- **Results:** The solution focused auditors on the right claims and service providers, which saved \$5 million in the first 10 months of operation. Areas for service technician retraining were also discovered.

"The new automated process enables [us] to more accurately pinpoint which claims to review to audit smarter, not harder."

– Executive, Suspect Claim Detection

Data mining with predictive models

Using business rules, SAS Suspect Claims Detection not only identifies invalid or incomplete claims, but goes further by using data mining to detect suspicious claims. By looking at historical audit data, the solution is able to learn from your auditors' experience. However, in some cases there may not be enough history, in which case the solution provides methods to create the history and identify the suspicious claims.

A hosted solution

SAS has been in the business of hosting solutions for 10 years. With SAS, the solution is delivered with a secure, high-performance data processing infrastructure, with 99 percent or greater availability guaranteed. SAS Solutions provide the ideal infrastructure and support environment by the people who know the products best. You can have the confidence that your needs are being met, including hardware selection and staging, off-site backups, security and scheduled upgrades.

IT and analytics expertise

With SAS, you gain the benefits of industry-leading business analytics support from the SAS Advanced Analytics Lab, a premier analytical consulting group. This center of innovation uses SAS' core analytical expertise to apply the latest statistical and mathematical techniques through its warranty analysis and fraud framework solutions. The lab offers the experts needed to optimize your infrastructure, data warehousing foundation and business analytics applications.

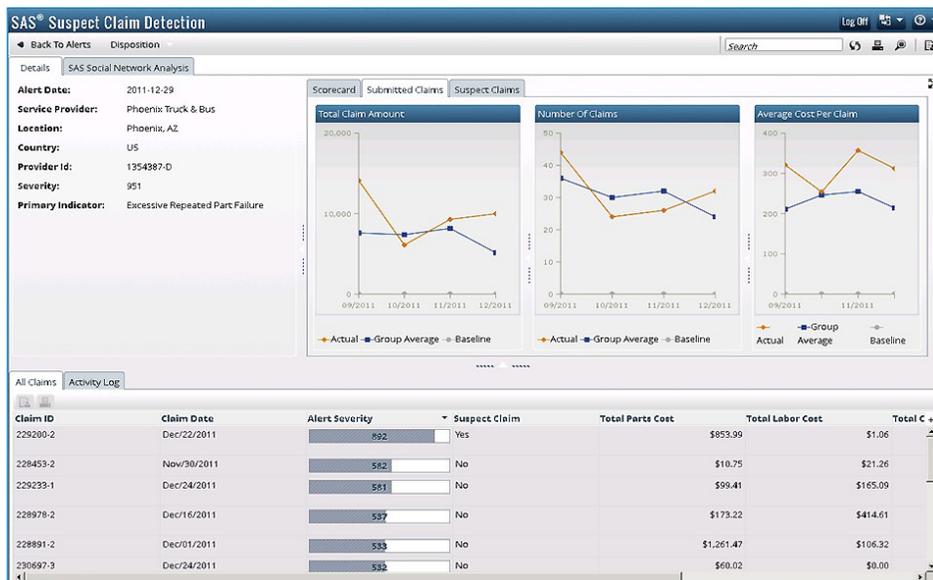
Flexibility

With SAS Suspect Claims Detection SAS Solutions OnDemand, you have no upfront technology investments and can manage risk and scale for growth as your strategy dictates. You also gain financial flexibility to pay monthly subscription fees with operating-expense budgets.

The SAS® Difference

SAS is the only vendor to offer a comprehensive solution with such a low upfront investment. With SAS, you get a total solution for 100-percent automated claim analysis from the industry leader in business analytics:

- **A hybrid approach.** Business rules alone are not sufficient to tackle fraud. Only SAS combines business rules, statistical tests and analytical models to significantly increase suspect claim recovery.
- **Near-real-time analytics.** Detect issues and eliminate waste while not disrupting the adjudication process or slowing payments due for legitimate service. Results are available in minutes - before the claim is paid.
- **Short time to value.** Gain a rapid return on investment with a short implementation time. Organizations receive superior business intelligence without the large upfront investment of in-house system development. There's no need to recruit and train more quantitative specialists to perform analysis or skilled IT professionals to provide 24/7 support, nor do you have to procure, maintain and secure software and infrastructure.
- **Enhanced productivity.** Auditors are highly trained, expensive personnel, and their productivity is critical. Reviewing valid claims unnecessarily or researching like claims for comparisons can be an enormous source of waste. By focusing auditors on the most suspicious service providers and claims, their time is used more effectively, and their productivity increases.



The Service Provider Scorecard and drill-down reports highlight and quantify suspicious activity.