

Calculate the Return on Investment (ROI)

INSURANCE INSIGHTS

Even before the pandemic, insurers have been battling against rising insurance fraud, estimated to cost insurers \$80-\$100 billion (USD) in lost revenue this year. For smaller insurers the cost of fraud is compounded. Budget and resourcing constraints, data challenges and accelerated growth combine to leave smaller insurers particularly exposed to fraudsters. The solution lies in fraud prevention however, when it comes to investing, how can insurers gauge the ROI of a fraud detection solution?

Calculating the cost of fraud today

To understand ROI, insurers first need to understand the factors that influence both direct and indirect cost. It sounds simple but it definitely is not. The cost of fraud is not only the direct cost of the fraud itself but also the indirect cost of the customers lost along the onboarding or claims process – discouraged by slow responses and frustrating processes. According to an [EY study](#), 87% of policy holders stated their claims experience significantly impacts their decision to remain with their current insurance provider.



A manual approach: hit and miss

For small to medium size insurers that process circa 150,000 claims annually, a random spot check to manually review the processes and decisions for each claim can provide an indicative view of the cost of fraud. Using a manual review process, most insurers approximate that 5% to 10% of claims are, in fact, fraudulent. If the average cost per insurance claim is around \$10,000 USD, just 5% fraud spend could cost the said insurer \$75 million USD.

While this approach requires minimal investment, it begs the question of how many fraudulent claims are missed not to mention factoring in costs incurred throughout the claims process. Additionally, with the in person checks unlikely to make a comeback, the industry is becoming ever more reliant on data to approve or deny claims. If insurers continue to rely on manual processes in the new data epoch, they risk huge increases in missed fraud as well as missed opportunities for improving customer retention through smoother onboarding and claims processing. To grow and thrive, insurers need to harness their data through intelligent analytics and machine learning – understanding their customers, good and bad, and measuring fraud for an intelligent view on risk, opportunity and ROI.

Intelligent Assessment

As we've touched upon, identifying the volume of fraud impacting a single business can be tough when using manual based methods. We know that the answer lies in data, machine learning and analytics but for any solution to make sense, it needs to show significant ROI. Through our work with large and small insurers across the world, we've identified a broad formula for making this assessment:

1. Using machine learning, 100% of claims are assessed – rather than the handful reviewed in manual assessment - with 5% to 15% on average flagged for referral to the Special Investigation Unit (SIU).
2. The average number of alerted claims accepted for triage with a SIU can be up to 90% (see Zurich case study [here](#))
3. From this, we would expect risk adjustment between 25% and 50%, with an average saving of circa \$10,000 per converted claim – bearing in mind that the average claim can take up to a year to investigate.

The industry average for cost savings is around £6:£1 meaning that for every £6 saved, an insurer would expect to spend £1. When evaluating the ROI of an insurance fraud solution – the key is looking at how to increase that ratio.

By using machine learning, insurers can check all claims in real-time and enjoy improved triage efficiency, alert prioritisation, increased triage acceptance rate, and most importantly, improved conversion rates to drive greater savings.

Key considerations for insurance fraud detection models

There are two key considerations to keep in mind when transforming fraud investigation processes to improve ROI.

1. Checks need to be balanced with the customer journey, allowing for good customers to be processed quickly. For example, an off-the-shelf insurance policy can be bought with an aggregator in a matter of minutes, but more personalised processes which are generally conducted over the phone can take longer as more information is required. Don't let lengthy manual fraud checks get in the way of decision making processes for policy estimates. Ask the question: Can my fraud solution automate certain manual checks without impacting risk assessment?
2. By using machine learning as part of the estimation and initial fraud check process with new customers, there are a number of quick checks that can be put in place to improve this process for both insurers and the end customer – such as built-in Social Network Analytics (SNA). By using SNA, insurers can see how many policies have been created from a single device, flagging new customers that have a created suspicious amount of policies from one device. Ask the question: How does my fraud solution impact investigator speed and accuracy?

As we look to the future, the digital shift presents both a large opportunity and extensive potential risk. For smaller insurers the impact of the digital era can be defining and successfully navigating promises around data solutions, cost and benefit requires a considered approach. The question of ROI is both more complex and more straightforward as our ability to measure, track and assess moves from manual obligation to competitive edge. The answer lies in knowing the right questions to ask.

Contact the BAE Systems Applied Intelligence insurance fraud team today if you need help creating a business case for upgrading your insurance fraud solutions.

NR NetReveal[®] Insurance Fraud

Preconfigured and packaged to suit the specific needs of small and medium sized insurers, our solution prevents, detects and investigates fraud throughout the insurance lifecycle, minimising the impact on genuine claimants and streamlining the claims process.

With the NetReveal pre-packaged insurance fraud solution from BAE systems AI, small to medium sized insurers would expect to see an average saving of £9 for every £1 spent externally once the model has reached maturity over a three year period. In comparison to the industry average of £6:£1, £9:£1 is a very attractive savings ratio to present to board members.

Delivering results from day one, our solution is available in the cloud within weeks and can scale to suit the size and quality of any insurer's data.

The NetReveal Insurance Fraud solution uncovers suspicious behaviour by:

1. Identifying, linking and scoring people, places, events, businesses and other claim and policy attributes
2. Using machine learning and network analytics to reveal how they are connected
3. Integrating data from an insurer's portfolio — from all lines of business, as well as appropriate 3rd party data.

Find out more about NetReveal here:

<https://www.baesystems.com/en-financialservices/solutions/insurance-fraud>

