



# SHIFT

## SHIFT TECHNOLOGY INSURANCE PERSPECTIVES

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**2023 SIU CLAIMS FRAUD BENCHMARK REPORT**

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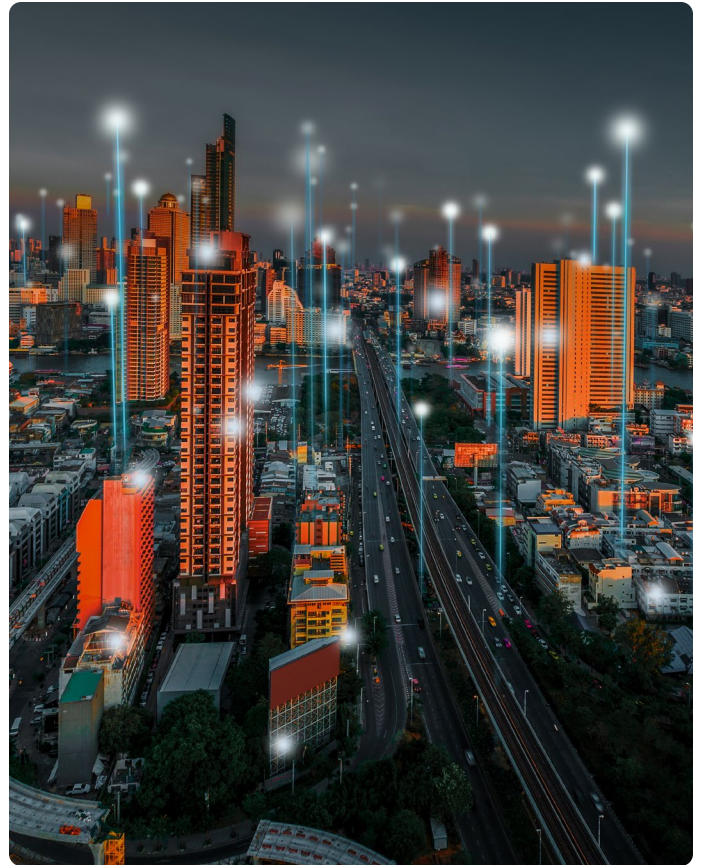
# From the Editor

In April 2020 we published our very first Shift Technology Fraud Insights Report. Using our unique view into the global insurance industry we examined several fraud schemes impacting carriers and how technology could be used to effectively thwart them. One year later, recognizing that Shift's insights are relevant to more than just fraud, we revamped the report and relaunched as Shift Technology Insurance Perspectives. In this new iteration of the report we have explored the role Artificial Intelligence (AI) can play in the realms of claims automation, subrogation detection, underwriting risk detection, and of course, fraud detection.

Since we strive to continually evolve this report to the benefit of our readers, for this edition of Shift Technology Insurance Perspectives we are proud to bring to you our inaugural SIU Claims Fraud Benchmark. Here we provide an examination of real world results in the use of advanced AI to fight insurance fraud in 2022. Shift works with more than 100 insurers around the world, which puts us in a unique position to witness how the best SIUs in the business are winning the fight against insurance fraud, positively impacting the bottom line, and helping deliver exceptional policyholder experiences.

For this benchmark report we examine specific criteria that can help illustrate how AI augments the SIU's capabilities in fighting fraud and what kind of results can be expected when AI is used to its maximum effectiveness. These key performance indicators (KPIs) are:

- Investigation acceptance rate
- Investigation impact rate
- Incremental fraud stopped



Shift believes these KPIs represent the true power of using AI as an integral part of a holistic fraud mitigation strategy. Are you finding as much fraud as possible? Is your solution accurate? Does your solution help investigators close more cases successfully? Continue reading to see how your fraud mitigation strategy stacks up and to get an analysis of the trends, both regional and global, that are driving the adoption of AI-based fraud detection solutions.

As always, Shift Technology Insurance Perspectives would not be possible without the contributions of folks from across Shift. Special thanks to Stéphane Adjou, Grady Behrens, Joanne Butler, David Dumas Lattaque, Renee Moussa, Mike Renda, and Arthur Vandenkerckhove.

# Purpose and Methodology

## Measuring SIU performance

SIU teams across the globe know that achieving their objectives to find and stop fraud means knowing investigative performance. [Key performance indicators](#) ensure that the fraud detection program aligns with the overall strategy of the claims organization, whether that be prioritizing high-impact cases, right sizing alerts to investigation team size, or increasing case quality. As an incremental enhancement to the overall SIU fraud program, AI fraud detection accuracy, investigational support, and impact become important benchmarks of performance. The corresponding KPIs - investigation acceptance rate, investigation impact rate, and fraud stopped per claim - provide the ability to track AI-based fraud detection's contribution to the overall fraud program. While each SIU has unique performance targets based on organizational objectives, this report's goal is to provide a global benchmark view into the KPIs most relevant to AI.

## Advanced maturity in AI adoption

A core observation from 2022 results is that an insurer's maturity in deploying advanced AI technologies positively impacts their incremental fraud detection results. Many factors play into AI maturity, and in our work with SIUs across the world on their anti-fraud journey, we have observed that insurers fall within a range of maturity in AI adoption. This typically extends from early AI fraud detection implementation through to advanced AI maturity in the areas of external data integration, complex fraud detection methods, accelerated investigation processes, and

continuous performance management. The positive results of advanced AI maturity are convincing: North American Property Insurers with advanced AI maturity successfully stopped an incremental \$60,000 for every 1,000 claims analyzed using AI-powered claims fraud detection, and advanced AI maturity auto insurers achieved \$43,000 for every 1,000 claims analyzed. That means advanced AI maturity insurers with 100,000 annual claims are stopping an additional \$4.3-6M in fraud annually, on average.

## Methodology

With Shift's clients insuring the majority of P&C personal auto and property policyholders in the U.S. and other countries, their collective success provides an unparalleled view into AI-powered claims fraud detection. For this benchmark report, we compared 2022 performance for customers across North America, South America, Europe, and Asia, who collectively analyzed 13 million auto and property claims using Shift's Claims Fraud Detection. These results are summarized as "Advanced AI maturity" benchmarks, defined as the average for the top 1/3 of insurers\* for each KPI, by line of business. The KPI benchmarks are labeled as "Advanced AI Maturity" throughout the report.

“ **Advanced AI maturity insurers with 100,000 annual claims are stopping an additional \$4.3-6M in fraud annually.** ”

### KPI Metrics Definitions

Measurement is essential in evaluating the performance of an SIU program. For the purposes of this paper we have defined key metrics for investigation acceptance rate, investigation impact rate, and fraud stopped per 1,000 claims analyzed.

**Investigation Acceptance Rate** = Number of AI-powered Alerts Accepted for Investigation/Number of Qualified Alerts

*Shows the accuracy of the AI fraud detection alerts*

**Investigation Impact/Conversion Rate** = Number of Alerts Impacted/Number of Alerts Investigated /

*Shows SIU program capacity to transform suspicious alerts into financial impact*

**Fraud Stopped (per 1,000 Claims Analyzed)** = Value of the fraud stopped/Total number of claims analyzed (in USD)

*Measures the financial cost of stopped fraud relative to the Insurer's total claims volume*

\*Rounded down depending on sample size

# North American Market Trends

While SIUs are focused on their anti-fraud objectives and KPIs, it's also important to consider broader trends that shape insurer market strategy. In North America, insurers are responding to critical challenges while they also seek to advance their anti-fraud efforts, namely digital transformation, legacy systems migration, and personnel adaptation.

## Digital transformation

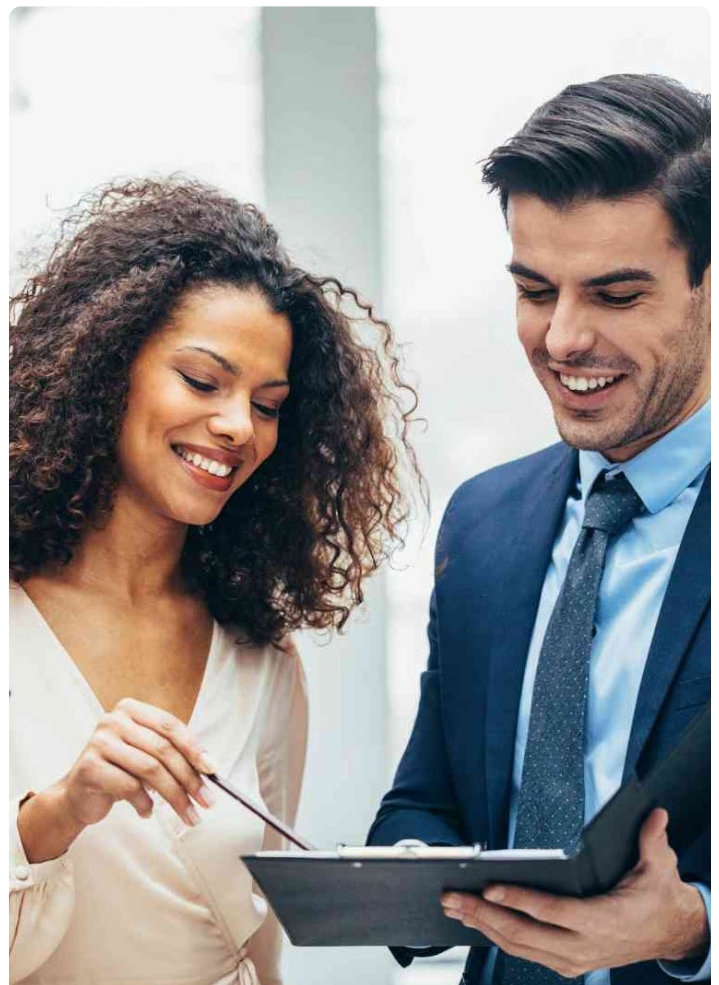
When it comes to digitization, the insurance industry is not alone. Customer demands for a more digital experience has grown exponentially, driven by global events. In fact, 85% of CEO's cite the COVID pandemic as the instigator for [digitization of their operations](#) and creation of next-gen operating models. With more digital touchpoints comes more opportunities for bad actors to commit fraud. Aite Novarica notes that 67% of insurers see increased fraud risk due to this digitization. To evolve fraud detection with these new digital journeys, Insurers are responding by including integrated real-time fraud detection along with claims systems integrations. At the same time, continuous AI updates ensure that SIU teams stay ahead of new fraud methods.

## Legacy systems migration

While digital transformation is a top priority, legacy technical debt is a major barrier to new customer experiences as well as resourcing to develop advanced anti-fraud capabilities. Though there are challenges in transformation, its [benefits](#) greatly outweigh the effort and resources needed. Advanced CIOs are taking a pragmatic view of their anti-fraud technology in relation to legacy systems, choosing AI fraud detection products that requires minimal resourcing so that they can focus IT resources on legacy transformation, while also investing in solutions which can adapt as the insurer moves to [modern cloud ecosystems](#).

## SIU team adaptation

Much like insurer systems undergoing modernization, insurer teams, including the SIU, are undergoing a similar transition. Between experienced insurance talent retiring, talent acquisition continuing to [see headwinds](#), and automation changing the [skill set required](#) for claims and SIU teams, insurers are investing significant time and energy into talent. Advanced insurers are adopting long-term approaches by unifying their system to single investigation screens so that, as one Head of Claims for personal auto in the US [commented](#), "investigational guidelines are in place for new hires."



# KPI Benchmarks

Advanced insurers achieved high performing incremental results in their fraud detection during 2022, in terms of AI alert accuracy as well as AI investigation support to close cases with impact. Globally, advanced AI maturity SIU teams globally accepted a majority of AI-driven alerts, with 69% of every 100 alerts accepted for investigation. Once in investigation, a majority of property case investigations are successful in stopping fraud, while 43% of automotive cases are closed with impact.

Regional analysis show strong performance in AI-accelerated SIU Investigations across the globe. For an AI-equipped property insurer with advanced maturity in North America, they can expect to successfully close 55% of their investigations.

Claims investigation teams across the globe are able to compare acceptance and investigation rates to gauge overall program performance, but it's also important to understand the average value of fraud stopped in their region. This ensures that SIU teams are prioritizing, accepting, and investigating relevant cases. In North America, insurers with advanced AI maturity achieved an average of \$43,000 and \$60,000 in incremental fraud stopped per 1,000

## 2022 SIU Performance Advanced AI Maturity

Automotive Property

**69% 69%**

Investigation Acceptance Rate

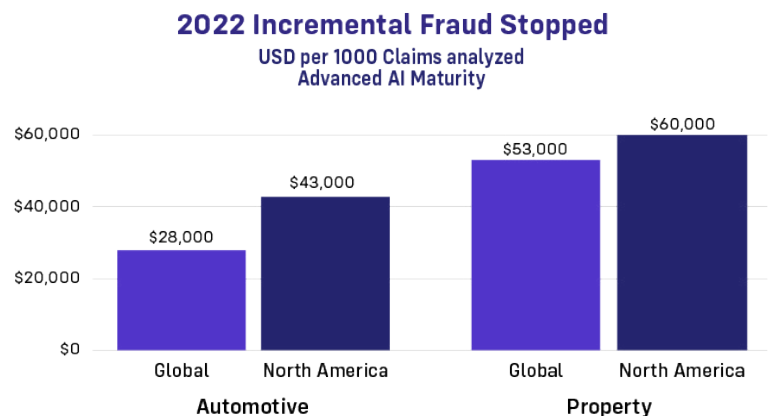
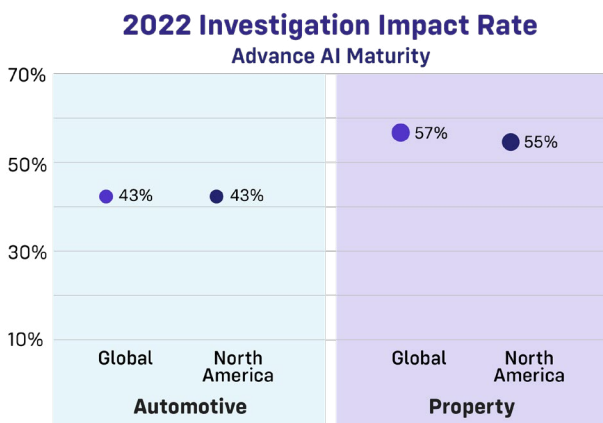
**43% 57%**

Investigation Impact Rate

**\$43K \$60K**

Incremental Fraud Stopped - North America  
(USD Per 1000 Claims Analyzed)

claims, for automotive and property lines of business, respectively. In other words, an advanced AI maturity insurer in North America with 100,000 total annual property claims was able to stop more than \$6M in incremental fraud.



# Drivers of Advanced AI Maturity

While customers on their journey of AI-driven fraud detection are all achieving incremental benefit, there are some notable drivers of advanced performance that merit further discussion.

## External Data

External data integration gives insurers a view into their claims data that previously wasn't possible. Whether from vendor managed sources like Shift's external data library or API connections into trusted data partners, insurers are able to find more fraud when external data is fully integrated into their AI claims fraud detection. Impact dollars due to external data alone can reach up to a third of additional savings with the right AI solution. From a KPI perspective this results in an increased impact rate by 34%.

## AI capabilities

Another important consideration for advanced performance is not whether AI is adopted, but as one P&C claims manager expressed, "The use of AI and machine learning enables us to detect fraud techniques which we have not even noticed before." Major case and provider network detection, for example, rely on unsupervised learning which can detect complex but hidden connections between claimants, policyholders, and providers. Similarly, Entity reconstruction applies layers of reinforcement learning, training AI models to uncover seemingly undetectable relationships. These techniques, together with data integration, deliver the exceptional acceptance rates seen by mature insurers.

## Investigation Efficiency Accelerating Time to Investigation

A long time Shift client was focused on efficiency. They used Shift's AI-driven investigation software with 100% explainable context to accelerate their triaging of claims

**Property**

**Automotive**

**80%**

Cases assigned to investigation within 14 days

**2x**

Cases assigned faster than the insurer's average triage time

## Investigation efficiency

Investigational efficiency plays a critical part to anti-fraud success, especially as high acceptance rates for AI-driven detection lead to more actionable cases to investigate. To ensure newly identified cases can be managed appropriately, advanced insurers are integrating investigational tools into their anti-fraud process. Complete context of what created a fraud alert, whether in the Shift investigation software or embedded into the core system, equips the SIUs to confidently proceed with investigations. Similarly visualization of network and entity relationships provide the next steps for case analysis. As one advanced insurer described, AI-driven investigational tools turn "months into minutes" for capable investigation teams.

# Drivers of Advanced Maturity

## Expertise in success management and collaboration

Maturity in AI use does not come without challenges in process and organizational change. As a senior innovation leader in global reinsurance notes, advanced AI maturity is not possible with “cookie cutter” software. Instead, insurers require a “whole experience... not just a product,” to achieve enduring success in fraud detection. For mature insurers, that “whole experience” means working with a vendor who brings expertise in AI implementation in claims teams, strategies to accelerate investigation, and a willingness to continually support and improve fraud detection performance.

## Closing

Many trends are driving SIU claims anti-fraud impact, from price and costs differences, to line of business structure. But insurers using AI with advanced maturity are seeing accuracy and investigational efficiency that is driving substantial incremental savings. Incorporation of external data sources, full use of leading AI techniques, full adoption of investigational software, and reorientation of teams to make use of AI-based fraud detection has led to leading insurers to achieve outstanding success to complement their anti-fraud programs.



# SHIFT

## About Shift Technology

Shift Technology delivers AI decisioning solutions to benefit the global insurance industry and its customers. Our products enable insurers to automate and optimize decisions from underwriting to claims, resulting in superior customer experiences, increased operational efficiency, and reduced costs. The future of insurance starts with Decisions Made Better.

Learn more at [www.shift-technology.com](http://www.shift-technology.com)