Challenges, Trends, and AI Opportunities for Insurance Carriers

An Executive Guide

Co-created by

Emerj Artificial Intelligence and **Shift**

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Introduction

The biggest problem facing insurance firms today is a one-word answer: fraud. Yet despite widespread data showing in detail the massive problem that is insurance fraud, many remain perhaps willingly ignorant as to the ubiquitousness of the problem.

> " *A lot of people don't understand the magnitude and scope of the fraud that the insurance industry has," states Andrew Schwartz, a property and casualty insurance analyst at Celent.*
>
> *Andrew Schwartz, Property and casualty insurance analyst at Celent*

To illustrate his point, Schwartz cites the following statistics:

→ An estimated 10 to 20 percent of the payouts made by insurers are fraudulent. ([Per](#) CAIF, insurance fraud costs insurance carriers at least $80 billion annually.)

→ Nearly a quarter of people surveyed say it is acceptable to "pad" a claim.

The widespread and costly problem of fraud, coupled with insurance companies' desire to meet the high-quality of service demanded by their customers, puts the industry at what Schwartz calls an "inflection point." This inflection point is the product of seemingly-opposing forces: effective fraud detection and high customer satisfaction.

In other words, insurance carriers don't want to pay millions in fraudulent claims, but not at the risk of slowing down the process and upsetting - and risk losing the business of - already-on-edge claimants.

What is the answer to this dilemma? Can a carrier satisfy its customers' need for a quick payout and good customer service without sacrificing proper fraud detection capabilities - not to mention a company's hard-earned revenue?

Schwartz says that such a solution already exists.

> " *With AI, it's easier than ever to strike a balance between having a strong customer experience, but one that's not at the expense of reasonable fraud detection measures.*
>
> *Andrew Schwartz, Property and casualty insurance analyst at Celent*

Previously at Emerj, we've covered other [use cases](#) of AI for fraud in the insurance space. Our research has found that specific AI techniques - such as anomaly detection and machine learning with predictive and prescriptive analytics - can assist firms with both the detection and resolution of fraudulent claims.

In this whitepaper, we will take a closer look at two use cases from Shift Technology that demonstrate the promise of AI in the insurance space: detecting network fraud and integrating external data sources into fraud detection workflows.

Throughout, we will show that leaders who think enhanced fraud detection and good customer service are trade-offs are mistaken. In fact, by automating fraud detection processes, a carrier may free up resources — monetary and others — which leaders can then re-allocate to other high-need areas of the business.

from the four largest insurance companies in France, whose membership numbers represent about 30% of the country's auto insurance market.

Shift states that it used the company's AI-enabled fraud detection solution, Shift Claims Fraud Detection, to run client data through its claims analysis algorithms. Shift Claims Fraud Detection then processes the claims data against "a set of core fraud scenarios" provided by ALFA through its claims analysis engine.

Among the ALFA-provided data included were:

→   Policyholders with an excessive number of policies.

→   Policies and coverages taken out after the event.

→   The trafficking of wrecked vehicles.

→   Policyholders with multiple total losses.

In a prior Emerj article, our analyst elaborated on CNA Financial's use of Shift's same claims fraud software. In that article, an executive of the company elaborated on the partnership with Shift, stating that it would help the company *"by focusing on the most suspicious cases with pre-identified paths for investigation."*

Returning to the current use case: If Shift's algorithms detected that a claim may have been fraudulent, the relevant output data - in the form of an alert message - was sent to ALFA to be validated. Per Shift, only the alerts verified as *"highly suspicious"* by ALFA and involved at least two of the four insurers were processed further.
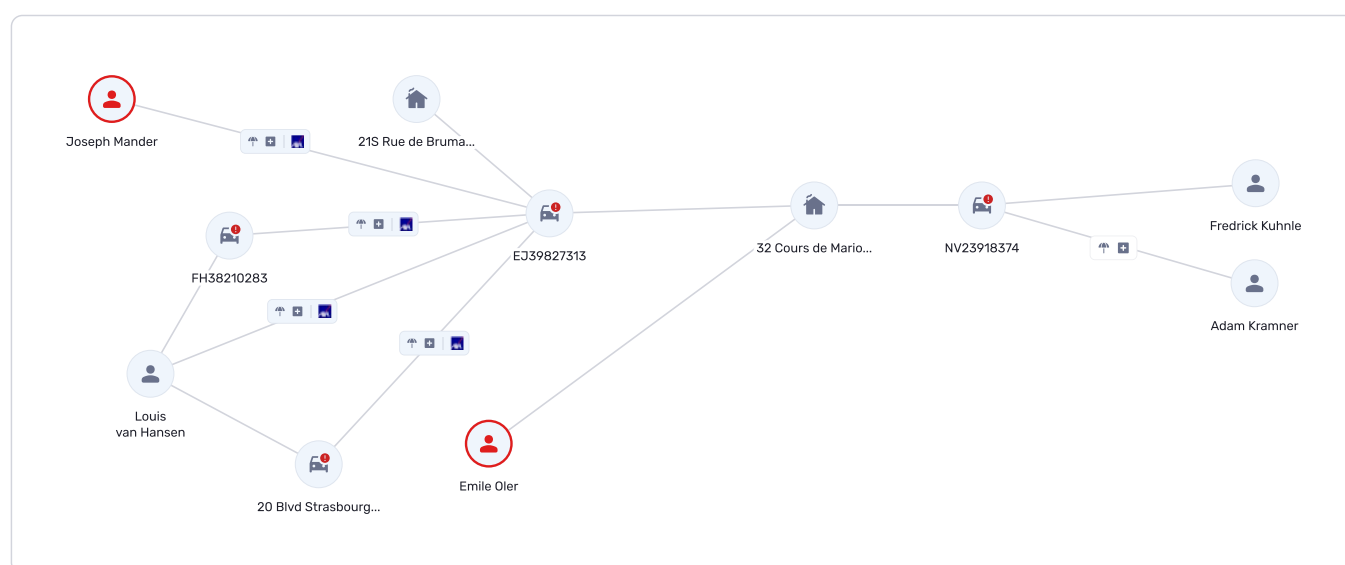
Claim Alert. Source Shift

Network Detection

In the words of Alicia Holmes, Special Investigation Unit and Claims Consultant at Shift Technology, using AI to detect network fraud is one of the most significant and bottom-line boosting opportunities for insurance carriers: *"If you're not using AI to detect network fraud today — or not doing it very well — that's where AI can help and make some immediate impact."*

Let's investigate perhaps one of Shift's most critical use cases: integrating claims data from three different insurance carriers to create, and gain approval for, a fraud detection engine for a governmental regulatory body.

Challenge

ALFA is an offshoot of the French Federation of Insurance (FFI), France's leading trade organization, representing over 90 percent of all French insurance companies. ALFA sought to identify a network fraud scheme impacting several of its member insurance companies.

Before Shift could fully implement whatever solution it designed however, the company needed the approval of the Commission Nationale Informatique et Liberté (CNIL), an independent administrative body of the French government that ensures data privacy law is properly enforced. Four of the nation's largest insurers volunteered to participate in the nascent project.

As a result, Shift's challenge was doubled. First, the company needed to demonstrate its AI-assisted fraud detection system's efficacy to obtain the French government's approval. Second, it needed to deliver tangible results to four of France's largest insurance carriers.

Actions Taken

According to Shift's own reporting, the company first gathered customer and claims data, e.g., client name, claims amount, incident date, etc.,

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✅ Results

> " *The great added value of Shift resides in its extremely significant knowledge of the insurers' data, and its capacity regarding the organization and restitution of them.*
>
> *Maxence Bizien, Director of ALFA*

With both ALFA's and CNIL's approval, Shift's solution is now able to successfully analyze nearly a third of all insurance claims in France, by the company's own reporting. Shift states that its software is currently achieving a hit rate of 75%, which is expected to rise "significantly" as more insurance companies join the project.

External Data Migration

One of the most significant opportunities for AI in the insurance space is what Todd Williams, Head of Claims at Bristol Insurance, calls expanding the bandwidth of data. Using social media data as a case-in-point, Williams says: *"Everyone is on social media ...[and] there's so much data and information, and having AI being able to capture that"* is incredibly valuable, Williams asserts.

Social media data is just one example of the kind of external data that proves very useful for preventing fraud. We'll discuss some of the additional data types later in the use case.

Mr. William's take on data proliferation and availability is a good segue into our second use case: the collection, analysis, and utilization of multiple third-party and external data sources for the purpose of claims validation.

🎯 Challenge

An efficient claims validation process that maximizes the detection of fraud, waste, abuse, and errors is critical for insurance carriers. Claims validation affects many metrics and KPIs, from client satisfaction and net promoter scores to average revenues per client and profit margins.

▶ Actions Taken

In an attempt to achieve the client's aim of more effectively processing claims, Shift implements external data migration as an essential component. According to the company, Shift's access to over 100 external data sources helped to expedite the insurer's claims processing workflow while increasing value.

Upon announcing their achieving globally-recognized standards of compliance, Shift described their solution as designed to "take advantage of both structured and unstructured data from not only our clients' internal sources but also relevant third-party and external sources as well."

That external data integration assisted Shift clients with both claims automation and decision-making optimization throughout the policy lifecycle.

"Integration of internal and external data sources," says Schwartz, is helping companies form *"a more complete claims picture."* As is *"the ingestion of structured and unstructured data to enrich the claims profile."* Among the structured and unstructured data that Shift collects from external sources include industry, vehicle, and corporation data.

Specific examples include:

→ P2P marketplaces.

→ Company information.

→ Weather reports.

→ Social media data.

Shift also partners with leading data providers such as LexisNexis and the National Insurance Crime Bureau (NICB) to enrich its data capabilities.

Efficient, customizable user interface for SIU and claims teams

Drill Down

Measure Conversions

Track your hit rate

SHIFT

Year overview

Transformation Funnel

| 3% | 98% | 83% | 98% | 4% | 4.05k | 83% | 74% |

Overall view
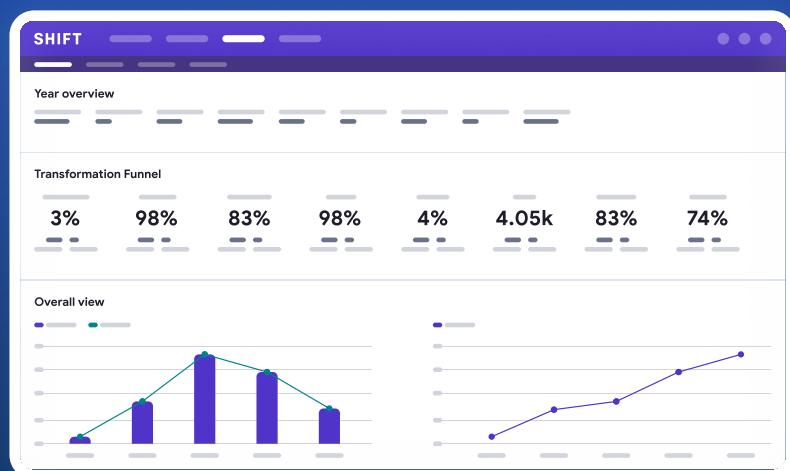
User Interface. Source Shift

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✅ Results

By integrating data into its comprehension AI-enabled software, Shift published the following results for its clients:

→ Saved $9 million for a home insurance carrier that would have otherwise gone to fraudulent claims while increasing the transformation rate (hit rate times conversion rate) by 3.6 times.

→ Increased both ROI and transformation rate for a car insurer by eight times.

Actionable Takeaway

"If you're not using AI to detect network fraud today - or not doing it very well - that's where AI can help and make some immediate impact," says Holmes.

All things considered, what actionable information should insurance company leaders take away from these findings?

First, artificial intelligence is perhaps the most promising solution for detecting and preventing fraud in the insurance industry. The rapid advancement and relative cost-effectiveness of AI and ML tools, coupled with the proliferation of — and the ability to procure, analyze, and process — internal and external data, have proven a highly effective countermeasure.

Another potentially good use case for AI, specifically machine learning and predictive analytics, is potential outcomes following a FNOL. "Given the data that comes in initially, what is the predictive model for the end result of that claim?" asks Williams. "Will there be serious injuries? Will there be difficulties moving the vehicle? Will there be potential fraud issues? Will there be medical providers?" Using AI to predict what happens is another big potentiality, Williams asserts.

Other areas where AI is potentially helpful in the insurance space are risk assessment and reduction of human error. Alicia Holmes elaborates: "Finding the right claims faster and with greater accuracy," which is resulting in "SIU teams spending their time on the claims they should be spending their time on." All of these features is enhances the efficacy of the claims process.

What low-hanging fruit is there that leaders can easily grasp at resolving using AI? Besides organized fraud, says Holmes, its efficiency. "Identifying the right providers, the right issues that are impacting your business and get you that big result quickly."

"Getting the right claims to right people: claims to the right adjuster, the most experienced adjuster," answers Williams, *"This increases the speed of the claim, enhances customer experience and employee confidence level."*

About Shift:

Shift was founded on the belief that Artificial Intelligence (AI) has the potential to unlock the future of insurance, solve difficult challenges, and empower insurers to see more, do more, and be more for their customers.

The Shift team is comprised of hundreds of insurance-focused Data Scientists, Customer Success Advisors, Engineers, Project Managers, and Insurance Industry Experts.

We are 100% focused on creating AI-native solutions to help the world's leading insurers deliver amazing customer experiences by making better decisions on every claim, every day.

SHIFT

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About Emerj Artificial Intelligence Research:

Emerj Artificial Intelligence Research is a market research and advisory company focused exclusively on the business impact of AI.

Companies that thrive in AI disruption run on more than just ideas. They leverage data and research on the AI applications delivering return in their industry today and the AI capabilities that unlock true competitive advantage into the future - and that's the focus of Emerj's research services.

Leaders in finance, government, and global industries trust Emerj to cut through the artificial intelligence hype, leverage proven best-practices, and make data-backed decisions about mission-critical priorities.

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