

SHIFT



Case Study | Tokio Marine & Nichido Fire Insurance Co., Ltd.

How AI solutions are transforming claims operations for a better future in insurance

Shaping the evolution of decision-making with Agentic AI and Generative AI

www.shift-technology.com

To provide stable, rapid, and appropriate claims payments — including in times of disaster — Shift Technology’s AI solutions help detect fraudulent claims and support damage assessment.

By reducing reliance on individual literacy or experience, these solutions move insurers closer to a more standardized and consistent operating model.

Tokyo Marine & Nichido Fire Insurance Co., Ltd. has long focused on accurately understanding the risks and challenges facing society and delivering optimal insurance products and services with a customer-first mindset. To provide stable, rapid, and appropriate claims payments — including in times of disaster — the company introduced Shift Technology’s AI solutions. In this article, we spoke with Ryo Yajima, Manager, Strategy Promotion Team, Claims Service Department, and Koji Nakagawa, Assistant Manager, Fire Claims Group, Claims Service Department, about the background, implementation process, and impact of the initiative.

Initial challenges

- Even in large-scale, wide-area disaster situations, the company wanted to **balance rapid claims response with consistent service quality**.
- In particular, for the review of damage photos and estimates, the company wanted to **standardize evaluation criteria to improve decision consistency** and achieve more stable operations.
- The company also wanted to **efficiently detect suspicious claims, especially fraudulent claims** that tend to increase during large-scale disasters.



Left: Ryo Yajima, Manager, Strategic Planning Team, Claims Service Department

Right: Koji Nakagawa, Assistant Manager, Fire Claims Group, Claims Service Department

Impact after Introducing the AI solution

- The process of **comparing multiple sources of information** and making assessments became more efficient.
- The company moved closer to a system that **controls variation in detection** and enables more standardized operations.
- The solution **highlights key points to check from the perspective of consistency across estimates**, damage photos, and claim statements, thereby improving the efficiency of claim handlers’ review work.
- As a result, the company moved closer to a setup that **enables both rapid response and consistent quality**, even in the event of a large-scale disaster.

Introducing AI solutions to improve the efficiency and quality of the claims payment process

Could you tell us about the background behind the introduction?

As part of its goal to become a trusted, customer-centric company, the insurer has been working to establish a system that enables fast and appropriate claims payments while maintaining high-quality claims service. However, one of the factors that can hinder this goal is fraudulent claims in the claims payment process. The company began to explore whether such fraud could be detected using cutting-edge technology.

In addition, to provide stable, fast, and appropriate claims payments — including during disasters — the company believed it was also important not only to detect fraudulent claims, but also to support the review of damage photos, estimates, and other documents, so that both the quality and speed of the review process could be improved.

Fraudulent claims have long taken many forms, such as making an accident that did not actually occur appear as if it did, or exaggerating the damage caused by an accident. Of course, to prevent fraudulent claims, the company has introduced automation through DX, while also establishing a process to carefully check claim history and other points of attention based on rules and past cases. On top of that, the company wanted to standardize the review criteria in order to improve the consistency of judgment and achieve more stable operations.

In normal times, this approach is sufficient to handle claims effectively. However, the real challenge arises

when a large-scale disaster, such as a typhoon or earthquake, causes a sudden increase in the number of claims. In recent years, natural disasters have become more frequent, and the volume of claims tends to increase more often. Even simply reviewing each claim accurately one by one places a significant burden on staff.

That is why, as part of its ongoing DX efforts to improve claims payment efficiency, the company began exploring AI solutions.

Why did you choose an AI solution?

We did not start with a strong preference for an AI solution from the outset. Rather, we explored what the most appropriate solution would be for the challenges I mentioned earlier, and AI emerged as one of the options.

Fraud detection and damage assessment involve not only processes that require human eyes and judgment, but also processes that involve comparing and analyzing multiple pieces of information. We believed that AI could contribute particularly well to the latter.

Evaluating the track record of insurance-specific AI solutions

Could you tell us why you chose Shift Technology's AI solution?

Detecting fraudulent claims is not easy without knowledge of the wide variety of increasingly sophisticated fraud techniques. In this respect, Shift Technology has been providing insurance-focused AI solutions since its founding and has a wealth of proven use cases overseas.

Recognizing this strong track record internationally, we began conducting a PoC (Proof of Concept) with Shift Technology around 2019.

Implementing two AI solutions: fraud detection and damage assessment support

Could you explain the implementation process and the AI solutions introduced?

We introduced Shift Technology's AI solutions into the claims payment process for fire insurance. The data used as input for the AI solutions includes policy data, claims data, estimates, and damage photos. Based on this information, the system checks fire-insurance-specific points of attention, and the results are fed back to claim handlers to help them move through the subsequent steps more efficiently.

The two AI solutions introduced were:

1. a fraud detection solution (hereafter, "Shift Fraud"), and
2. a damage assessment support solution.

Shift Fraud was launched in 2022, and the damage assessment support solution went live in 2023.

Shift Fraud was implemented by customizing and deploying Shift Technology's AI engine and standard fraud detection scenarios for our company. In addition, to detect vendors that facilitate fraudulent claims by methods such as deliberately creating damage or misrepresenting deterioration as accident damage, Shift Technology developed an AI engine that combines OCR, image recognition, and advanced document processing. This function analyzes vendor information contained in estimates and identifies repair vendors that may be involved in fraudulent claims.

The damage assessment support solution, which went live in 2023, uses AI to analyze the validity of the claimed contents in estimates and improve the efficiency of assessors' work. In 2025, the solution



was further enhanced with generative AI-based image analysis. Now, in addition to the content of the estimates, generative AI can assess the consistency of the attached damage photos and check them against other data, while also clearly highlighting points that claim handlers should pay attention to.

Were there any key points during the process from PoC to launch?

Although Shift Technology's AI solutions had a strong track record overseas, there were two important points we had to keep in mind.

The first was adapting the solution to the fraud situation in Japan, since the methods and types of fraudulent claims differ from those overseas. The second was making sure the solution fit our own claims payment process. For example, we needed to adjust how the AI-generated fraud alerts would be handled after they were raised, so that they aligned with the actual workflow of our claim handlers.

For the damage assessment support solution as well, we placed a strong emphasis on ensuring that the review points it suggested would not conflict with the judgment or explanations provided by staff, and that it would remain fast enough to handle large volumes of claims during disaster situations.

These points were carefully evaluated during the PoC stage, and even after launch, we have continued to make adjustments as part of an ongoing improvement cycle to further enhance quality.

Reducing reliance on individual experience and literacy, and enabling alerts based on consistent standards

How do you evaluate the AI solution?

One of the key strengths is that the system can generate alerts based on consistent standards, rather than relying too heavily on the literacy or experience of individual claim handlers. We believe this has helped move us closer to a mechanism that controls variation in detection and enables more standardized operations.

Looking at the specific use cases, the detection of specific repair vendors has been effective in helping us identify repair-vendor claim networks at an early stage. That said, fraud methods and schemes continue to evolve every day, so we need to keep working to ensure we can stay up to date and respond in a timely manner.

In addition, the damage assessment support solution provides review points for estimates, damage photos, claim statements, and other information based on consistent criteria. By standardizing these review perspectives, it helps improve the consistency of judgment and contributes to more stable operations.

Highly valuing our commitment to improving product functionality and accuracy

Could you tell us about your evaluation of Shift Technology?

Through weekly meetings and other regular touchpoints, we highly appreciate Shift Technology's sincere commitment to improving the functionality and accuracy of its AI solutions. In particular, the ability to review and adjust the AI solution's mechanism as needed according to the situation is a major advantage of working with Shift Technology. Since fraudulent claims continue to evolve, we need to keep reviewing and refining our approach to ensure they are detected reliably. We therefore look forward to continued support in this form of close partnership.

Finally, could you share your outlook for the future and your expectations for Shift Technology?

Our current goal is to further improve the quality of our claims service through the use of AI and digital technologies. By covering both human judgment and machine-based judgment supported by AI solutions, we believe we can achieve a more thorough and reliable response. In human judgment, it is important that claim handlers make appropriate decisions based on the individual circumstances of each case, and that they carry out the necessary checks and explanations properly.



As for the AI solutions, one of our future priorities will be to further improve accuracy by pursuing synergies between Shift Fraud and the damage assessment support solution. By promoting these initiatives, we aim to maintain high-quality claims services that meet our customers' increasingly diverse expectations and needs.

We understand that Shift Technology has a broad range of solutions based on its overseas experience, and we look forward to proposals in new areas as well. We see Shift Technology as a strong and reliable partner, and we hope to continue receiving your support.

Tokyo Marine & Nichido Fire Insurance Co., Ltd. / Company Profile

Since its founding in 1879, Tokyo Marine & Nichido Fire Insurance Co., Ltd. has upheld the purpose of “supporting everyday life and protecting people in times of need.” As the core company of the Tokio Marine Group, it continues to provide customers with safety and peace of mind through insurance. In recent years, in response to increasingly diverse needs, the company has sought to become “always by our customers' side” by offering solutions that go beyond traditional insurance.

Company Name: Tokyo Marine & Nichido Fire Insurance Co., Ltd.

Head Office: 2-6-4 Otemachi, Chiyoda-ku, Tokyo 100-8050, Japan

Founded: August 1879

Capital: ¥101.9 billion

Employees: 16,304 (non-consolidated, as of March 31, 2025)

Website: <https://www.tokiomarine-nichido.co.jp/>

About Shift Technology

Shift delivers AI agents that transform insurers' most critical work. By combining deep industry expertise and unmatched data resources, Shift provides proven results that have earned the trust of hundreds of the world's leading insurers. Our insurance-grade AI is accurate, explainable, and secure—empowering human experts to move with unmatched speed, total confidence, and a renewed focus on the people they serve.

Learn more at www.shift-technology.com

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