

Process Mining at a Large European Insurance Company

Claims handling is at the core of every insurance company. It is a notoriously difficult process to optimize due to its inherent complexity.

A claims handling process may have hundreds of pathways and thousands of exceptions, due to the numerous different types of claims, contractual and legal provisions, individual circumstances, and of course the fact that every insurance event is different.

Improving Motor Vehicle Claims Handling

Apromore collaborated with a leading European insurance company that holds a significant portion of the market share in motor vehicle damage premiums. The organization is striving for effectiveness, organizational transparency and customer service excellence. More than 10,000 employees work together to serve over 15 million customers, handling EUR 6.7+ billion (USD 8+ billion) in damage premiums.

Despite the recent implementation of a new claims management system, many motor vehicle claims were taking longer than the Service Level Agreement (SLA) of 30 days. Without a detailed picture of this claims handling process, it was impossible to make effective improvements in a timely manner. To get a better understanding of the process, the insurance organization worked side-by-side with Apromore and its partners SCS Consulting and HSPI.

Conformance and Performance Analysis

The objective of this process mining effort was to increase the total number of claims handled in the 30-day span imposed by the regulator. At the onset, the stakeholders in the




process had numerous questions, for example, does the claim amount or the damage type have a significant effect on the duration of claims processing? Is the training provided to liquidators adequate or should it be expanded or reinforced?

The team, together with domain experts from the insurer, utilized process mining to gain a better understanding of the claims process and to unearth opportunities for improvement.

Data Extraction

Data from 75,000 motor vehicle claims was uploaded into the Apromore process mining platform. While the stakeholders were aware of the complexity of the process, they were surprised when they saw that Apromore discovered close to 2,000 different pathways to handle motor vehicle claims. Subsequently, the teams conducted a detailed process variant analysis along with in-depth performance mining to compare claims handling between different regional offices, with the objective to validate the effectiveness of the insurer's prior process redesign efforts.

Initial Findings

- 
1,800
 More than 1,800 unique claims handling pathways were detected
- 
35%
 The most frequent pathways accounted for 35% of all claims
- 
1.5%
 The 5th most frequent pathway accounted for only 1.5% of all claims



Results and Benefits

The existence of 1,800 distinct pathways indicated that there was significant room for standardization. The Apromore team, together with the insurance company, worked out change actions based on the statistical findings, ensuring higher process conformance as well as process performance was attained.

For example, the Apromore team discovered that if the claim is opened the day after the report date, it has a 55% probability of not being handled within 30 days. To address this issue, the insurance company implemented incentives to open claims without delay and digitized the opening channels. Moreover, despite automatic reminders to surveyors of their appraisal return, on average, non-compliant process cases had a longer waiting time than compliant ones. The result is clearly a differentiating factor. Consequently, the management team reviewed the incentives to surveyors, making sure unnecessary waiting times were reduced.

In addition, the team used positive deviances as "best-practice" examples, providing a great opportunity to learn from the best performing offices. For instance, the best performer managed 60% of all their claims within the required 30 days. Based on their behavior, operating rules and liquidation policies have been improved.

After just a few months, the insurance company, together with the Apromore team, has achieved substantial long-term results. The number of violations of the 30-day SLA has been reduced by 25%. In the case of liquidation policies, the decrease in SLA violations is even more significant – 37%. Moreover, process performance has improved along different performance indicators. For example, the improved handling speed now ranges between 10 and 15 days. Overall, all these improvements have led to significant cost savings of EUR 15 million per year.



-25% of

violations of the 30-day
timeframe



-15 million

EUR per year
(USD 18M/year)



-37% of

violations of internal policies

Sneak-peek into the future

The improvements that the team identified using process mining have already led to significant cost savings. In addition, they allowed the insurer to attain consistently better performance and customer support. Following from these results, the company has now started using the predictive monitoring capabilities of Apromore, to transfer these tactical improvements to real-time operations. Specifically, the Apromore team

built a predictive monitoring dashboard, providing the insurance company with real-time predictive analytics to help them monitor their claims operations, such as predictions of SLA violations, remaining time and expected damage repayment. These analytics assist claim managers in identifying interventions aimed at minimizing the overall number of SLA violations while balancing the workload among claims handlers.

About Apromore

We are a leading provider of process mining solutions and AI-driven business process improvement. Our vision is to democratize process mining by enabling organizations to achieve digital transparency and operational excellence.

Do you want to learn more about the benefits of process mining and see where this can be applied to your business? Reach out and start your process mining journey today!

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