Smart Claims Assignment: The Amica Story

> Insurer Leverages Guidewire Live Predict for Property Claims Assignments

Amica Mutual Insurance Company is the longest-standing mutual insurer of automobiles in the US and a direct writer of personal lines insurance. Founded in 1907, the company employs more than 3,000 people in offices across the country. Amica is known for providing exceptional customer service to policyholders, being the first to earn 50 J.D. Power awards for customer satisfaction. The insurer has $5.8 billion in assets and an AM Best rating of A+ (Superior).

Amica’s journey with Guidewire included phased implementations of Guidewire core systems, including claims, policy administration, and billing. To continue delivering award-winning service, it sought a unified customer relationship management (CRM) platform, choosing to work with Salesforce and Guidewire. Amica also has a data science and solutions team that applies analytics to solve issues in claims processing as well as improve underwriting outcomes.

Claims Desktop Review Model

“Amica is known for delivering world-class customer service,” says Amanda Harclerode, Assistant Claims Assignment Manager. “To ensure we manage each claim appropriately, we have different teams of handlers: desk-paid handlers, field adjusters, and designated large-loss adjusters. Historically, we’ve reviewed every property claim manually before assigning a handler, which required considerable time even with a routine workload. That commitment increased significantly when a hurricane, wildfire, or other catastrophic event occurred and resulted in an influx of claims. Recognizing the limitations of this manual review process for assigning claims, we began to search for a better approach.”

Benefits

• Improved customer experience
• The right claim assigned to the right claims handler
• Improved claim cycle times
• Better claims inventory management
The Amica Enterprise Data Solutions team determined that the problem could be solved through predictive modeling and began collecting the data necessary to build and train a model. The team employed natural language processing (NLP) techniques to incorporate adjuster notes and other unstructured data into the solution. Python was used to develop a Claims Desktop Review Model (a multistage model for homeowners’ physical damage) from Guidewire ClaimCenter data. Next, the team worked to ensure that the model would accurately predict which homeowner claims could be handled through desktop review.

“We needed a way to deploy the model quickly so we could start using the results,” explains Assistant Vice President Raymond Zientara. “We looked at the capabilities of Guidewire Live Predict* and its ability to deploy a model in the cloud so we could call from any application, and the ClaimCenter framework made getting the results in the hands of our users easy. We selected Predict for these reasons, and we had our first model operationalized in ClaimCenter within a few months.”

The Python model was converted into Predictive Model Markup Language (PMML) and uploaded into Predict — but it didn’t work properly. The Guidewire team contacted the creator of the Python package, who agreed it was a problem on his end and worked with Guidewire to fix it. As a result, the package was improved, benefiting the Python open-source community and enabling Amica to generate an endpoint for operationalizing the model in ClaimCenter.

Integrating real-time predictive insights into ClaimCenter was accomplished in a matter of a few weeks. The project team included key business stakeholders, data scientists, claims systems subject matter experts, and a Guidewire developer. An initial Inception meeting ensured that everyone understood the model, the business applicability, and the goals of the project. The team then had a few working sessions to finalize the model inputs, triggering criteria, field mappings, and screen adjustments. Claims adjusters and handlers could see the model output on the applicable claim screen along with some dashboard information and related search functionality.

**Claims Review Process Becomes More Proficient**

The claims review process is becoming more proficient with the deployment of the Desktop Review Model. The model predicts if a claim is a good candidate for a desk review and adjustment or if it exceeds that threshold and would be more appropriately handled by a field inspection.

* Formerly Guidewire Predictive Analytics
Ensuring that each file has an appropriate handler is inherently important for accurate and efficient adjusting and, in turn, providing the high-end customer experience that Amica promises. Complexity of claims can range greatly, as can the experience levels of adjusters. This model is another tool to help match claim complexity with adjusters’ skill sets.

“My team is loving the immediate indicator that tells us whether a claim is a good candidate for desk adjustment, and we can triage it accordingly without having to review the entirety of the claim file,” says Harclerode. “We’re already working on ways to translate the insights from the model into business rules and automation, which will further improve inventory management, assignment cycle time, and getting the claims into the right hands.”

Analytics Roadmap

“We’ve been very happy with our ability to quickly operationalize models that solve business problems,” Zientara says. “My advice would be to plan deployment and operationalization up front. Understanding the business problem and having access to the right data are critical to the data science process, but just as critical is the ability to quickly operationalize the model. If it sits on the shelf for months or years, it remains an expense that has no value.”

Based on the learnings from its initial project, Amica is now self-sufficient in building and maintaining new models going forward. The insurer plans to operationalize several other predictive models, such as an auto injury triage model and other models on the sales and underwriting side, one of which is a propensity-to-cancel model.