

A photograph showing a person from the chest down, wearing a white patterned button-down shirt. They are sitting at a grey desk with several papers and a spiral notebook. The person's hands are visible, one holding a pen over the notebook. The background is slightly blurred, showing a white chair and a wall.

Using machine learning to improve underwriter efficiency at an insurance company

CHALLENGES

The customer, an insurance company, initially received claims documents with minimal consistency in data and structure. The underwriters had to analyze those documents manually, which was a time-consuming and inefficient process. The customer wanted to improve the underwriter's efficiency by leveraging Machine Learning (ML) to help analyze the documents and make the underwriting process smoother. Also, they wanted to increase quote throughput and build a foundation for future analytics.

SOLUTIONS

Neal Analytics helped them upload documents to Azure Blob storage and provided a unique ID for tracking across the solution. The ML solution extracted all tables or text available to analyze Natural Language Processing (NLP) and business logic to identify and extract relevant data points to complete a quote. The end results surfaced in Power BI dashboards helped them define and classify potential risks. The underwriters were able to view the original file to review accuracy and provide feedback.



RESULTS

Neal's ML solution helped the customer extract all tables or text to analyze with NLP and business logic to extract relevant data points, and the end results surfaced in Power BI. The customer experienced increased quote throughput and reduced manual labor hours.