



# Identifying emerging risk signals and automating manual tasks for a Global Insurance firm

## 71%

Decrease in manual work by risk analyst

## \$1.9 M

saving in 1 year

## 37%

less processing time

## CLIENT

The client is one of the world's largest insurers and financial services groups.

The company offers Property, Health, Business Insurance to close to 130 million customers across 70 countries.

## AT-A-GLANCE

### Challenges

The client employs hundreds of risk analysts who spend thousands of man hours reviewing medical journals, internet publications and social media feed to identify and extract emerging risk signals.

The client wanted a mechanism to automate this and provide insights

### Solution

- SquareShift's data experts developed OCR engine to extract content. The ML and NLP capabilities helped gather insights and spot trends.

## PROJECT CONTEXT

The client wanted to automate and gather insights from various publications, social feeds and journals that their risk analysts use to identify and predict emerging signals across markets and the economy.

## PROJECT OBJECTIVES

- Decrease the time spent by risk analysts in doing manual research.
- Apply ML and NLP capabilities to derive meaning and generate insight
- Develop user-friendly dashboards to share information .

## SOLUTION DELIVERY

- SquareShift used OCR to gather data from printed docs, PDFs, publications and social media analyzing the pixel data in the image and trying to match it to known characters.
- NLP was used to derive meaning from the docs using text comprehension, N-gram analysis, regular expressions, and graph network analysis.
- POS (Part of speech) was used to understand the structure of a sentence and determine the relationships between different words.
- SquareShift trained a machine learning model on a large dataset of text and used it to classify new text and make predictions.
- SquareShift developed a dashboard to present the insights and trends identified to underwriters in real-time. This can help underwriters make more informed decisions and improve the efficiency of the underwriting process

## TECHNOLOGY STACK

