

POLICE ACCIDENT REPORTS

Intelligent Data Extraction and Indexing



SCOPE

The project had a deadline of 3 weeks to configure and deploy a system to achieve the following:

- migrate a backlog of 80,000 accident reports, totalling 500,000 pages
- extract 400-800 fields per document

END USER

Government

PRODUCTS

Aluma

THEMES

Data Extraction
Indexing

CHALLENGE

The client, a state-level government agency, faced the seemingly impossible task of migrating a backlog of tens of thousands of police accident reports into a single state-level database.

This back-file project required processing a massive amount of data from diverse report formats, many filled out by hand, with significant variations in how individual police officers completed the forms. Given the sheer volume—80,000 accident reports totalling 500,000 pages—the state government lacked the time and budget to complete the project internally.

SOLUTION

Each report contained 400 to 800 distinct fields requiring extraction and validation. Manual configuration of this number of fields could have taken several days, so an AI-based method to locate and automatically configure the fields was used, while retaining the ability to manually fine-tune certain challenging fields when needed. These were then used to digitize and index the police reports efficiently, while coping with varying formats and handwriting styles from different precincts and ensuring data was output in full compliance with the D360 format required by the system.

The required fields were extracted with an accuracy rate of 95%, reducing overall labor requirement by 90%. The project was completed within 3 weeks, providing the client with a centralized database for all accident reports.

IMPACT



OPERATIONAL EFFICIENCY

The successful migration reduced the labor requirement for data entry by 90%. This allowed the state government to reallocate human resources from manual data entry to more strategic tasks, contributing to overall operational efficiency.



IMPROVED DATA ACCESSIBILITY AND ANALYSIS

With all accident report data centralized in a single database, the client could access information more quickly and efficiently. This enhanced accessibility enabled faster data analysis, leading to improved decision-making for traffic safety policies and more effective accident investigations.



COST SAVINGS AND RESOURCE OPTIMIZATION

By streamlining the data entry process and reducing manual labor, the project delivered significant cost savings for the client. The reallocation of resources and improved workflow resulted in a more optimized operation, allowing the agency to focus on core activities and long-term planning. This success set a precedent for similar projects in other state-level government agencies.