



Case study

Artificial Intelligence, Machine Learning, & Pattern Recognition Help Indict Seven in Workers Compensation Case Involving \$98 million being Fraudulently Billed

Challenge

Insurance claim files are complex by nature – their formats and mixed content, the volume of documents and supporting pages, and the variance of the data-types found within. This is a challenge that the insurance industry must manage on a daily basis as they review and manage claims processing. However, it becomes more complex when law enforcement is involved to investigate a potential criminal matter.

In the workers compensation case at hand, more than 1-million documents were obtained-following multiple years of investigative and discovery work. These documents included insurance claim files, consisting of varied document types: structured forms with machine print, healthcare records and patient charts with provider's handwritten notes, columnar data from explanation of benefits (EOBs) and other documents found within the clients' records, including California DWC-1 forms, a key document in the start of an insurance claim that contains a mix of structured and unstructured fields, including freeform handwritten replies.

Prior to smartC™, and once seized by the investigators, these evidence files were manually read and searched for keywords and phrases, and incredulous patterns of behavior such as data that was not correlated with the claim, or suspicious treatments or payouts. This manual document handling and search procedure was time consuming and costly, and one that the prosecutors could not continue with such a case at hand.

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Solution

Both A2iA and Infinilytics are technology development organizations with artificial intelligence, machine learning and pattern recognition at the core of their software offerings. By integrating *a2ia DocumentReader* into smartC™, and combining this seamlessly integrated solution with Infinilytics' predictive modeling, the Riverside County District Attorney's Office gained a clear and concise pathway to winning their case and bringing seven insurance fraudsters to justice.

With smartC™, the prosecutors were able to quickly gather data and virtually remove all manual document interaction, including document sorting and search.

The automated solution allowed for law enforcement to:



Automatically sort all seized documents, including the complex and unstructured documents found within insurance claims files. By allowing the software to analyze their layout and content, smartC™ was able to determine their categorization based on a holistic analysis.



Locate and extract the data automatically, including the cursive handwritten paper notes, columnar information and alpha- and numeric content.



Quickly analyze the extracted data and provide it to the predictive data model.



Issue arrest warrants and file charges based on the results.

Results

Following a Grand Jury proceeding, smartC™ helped the Riverside County District Attorney's Office prosecute a sophisticated fraud scheme that allegedly stole \$98 million from 18 insurance companies.

Prior to the implementation of smartC™, much, if not all, of this investigative work was performed by hand – a long, tedious and costly endeavor. It is estimated that the use of smartC™ saved years of time in the discovery process as well as tangible resources amounting to dollars saved.

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