

Case Study

Fidelity National Financial (FNF)

Overview

Fidelity National Financial is a **Fortune 500** company that provides title insurance in the US.

FNF has a huge database of property documents which they have maintained since the 1850s. The company must take the physical copies of documents and convert them to soft copies. This has been done manually till now.

The solution they required from **CoffeeBeans** was to **create an AI-based software** that can take the text read by the OCR and populate the fields in the required format.



Challenges

The challenges in this project were to build a system smart enough to interpret the raw data and 03 populate the respective fields. Also, the other challenge was to modify the previously used code.



Training data for the machine

The soft copies used to train the machine were not uniform. As each form had a different format, labelling it was a challenge.



Fixing the old code

The code being used was extremely complex and demanded huge resources to be run successfully



Populating the fields

The addresses present in the form were of three different types. It presented a difficult challenge in trying to get the system to understand which address to populate which field.



Making system capable of reading the data from the hand-written document

Reading the text written in the documents was challenging to be read by the machines, hence the normal OCR couldn't be used.

Solution

Specific tools were de- signed for matching an entity to the right field. This tool would colour code and mark the fields in a way that would make it easier for manual understanding. About the coding aspect, a new code had to be written from scratch as the one being used was inadequate. This helped reduce the cost and the resources required by a significant amount.

1.

Creating custom tools

Custom tools were designed to kickstart the real solution which was required by the FNF team .
2.

Writing the new code.

New code is highly efficient, cost reduced to ~0 by eliminating the need for multiple expensive AWS servers.
3.

Building an entity-relationship model

This model was built to map the primary, secondary, and tertiary addresses to the correct field.
4.

Training the OCR to read better

Reading the hand-written data by the machine was made possible by training the OCR to read accurately and effectively



This would not have been possible without your assistance! This is a culmination of your perseverance and hard work. Thank you and looking forward to Iteration 3.

-AJIT BHARDWAJ
Vice President, Fidelity National Finance

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Result

The proposed solution required the client to be on board as it involved not using the old codes. On implementation, the accuracy of the model increased, and the desired results were attained. Around **91% accuracy** was achieved for the model and expenses were **reduced from 80,000 INR per day to almost nil**. Also, the model did not need heavy servers to run and could do it on machines that they already had. The successful efforts taken by CoffeeBeans to achieve this feat were lauded by the FNF team.



We'll help you find the right solution. Get in touch with us at
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