Case Study - AP/AR Statement Data Extraction

Cync provides a diverse collection of financial software solutions that covers a vast range of account receivable financing, factoring, working capital loans, asset based lending and related credit services. By streamlining, standardizing, and automating the collection and analysis of the borrower's financial information, Cync delivers a complete software solution for commercial finance companies as well as banks that provide asset-based loans. Two of the critical documents processed to collect key information are the Account Payable and the Account Receivable statements, collectively referred as the AP/AR statements.

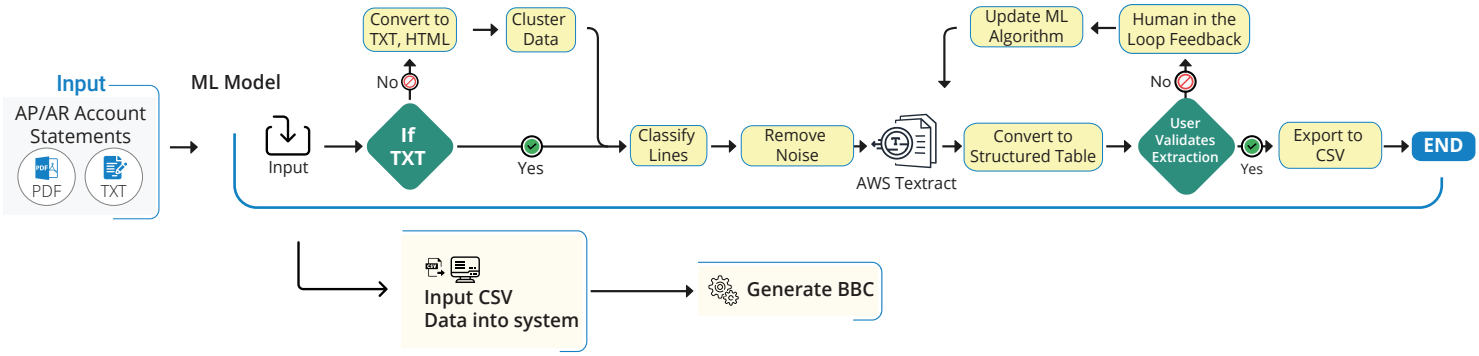
CHALLENGE:

The companies that borrow loans using ABL are mostly Small and Medium Businesses (SMBs) and do not tend to follow a standard format in generating AP/AR statements. This represents a challenge of processing documents efficiently and effectively for lending institutions and programs. Our client is a Lending Software product company focused on creating software solutions to manage ABL loans. Part of ABL lending process is verifying an entity's eligibility, a critical step where the data input for this step comes from the AP/AR statement. Upon processing, the borrower's eligibility company then created a certificate called the Borrowing Base Certificate (BBC). As the data input of AP/AR statements vary largely in the format/type of information being captured across different companies, lenders typically implement a manual approach to extract information from these statements.

Prior to implementation of the Idexcel solution, our client was using a traditional software to map, localize, and label the required content in the statement documents received. Even more challenging and time-consuming, these extraction templates would also have to be uniquely modified to accommodate the slightest change in character length for a specific field. These challenges made onboarding new lenders an extremely time-consuming and detail-oriented task, increasing the risk of human data entry error.

SOLUTION

Using Machine Learning (ML), Idexcel implemented a solution that would allow the machine to learn patterns and perform the extraction for this business process. While there are several document extraction tools available in the market that target blanket document types, using these tools would have led to several post-processing steps after the content was extracted. This specific problem required the utilization of AWS Textract combined with the creation of a unique and tailored ML algorithm built with the functionality to learn and adapt for new unseen patterns among the various AP/AR statements. A quick overview of the solution applied is outlined below in reference to the process diagram provided:



- The input document was differentiated mainly based on different document types.
- The ML algorithm scanned the complete document and removed noise.
- Further, the ML algorithm used AWS Textract to extract information and segregated different data objects into structured tables.
- The tabular data was then altered to match the input data layout, and then it was used by our client to generate the BBC.

BENEFITS

Improved Operational Performance: With Idexcel's "Human in the Loop" Approach of building an AI product the background Machine Learning was able to learn and achieve improved performance over time.

Faster Processing Time: Onboarding new lenders to our clients turned out to be significantly faster than before.

Enabling our clients to focus on other business strategic goals and were focus on other vital product enhancements for their solution.

Increased Operational Efficiency: Usually, the data extraction team creates the extraction template in 24 hours for any new file type for our customer.

With the application of the Idexcel solution, we were successfully able to convert over 70% of the unseen AP/AR data from 24-48 hours to 5-10 seconds.

OUR AWS COMPETENCIES

aws PARTNER Advanced Tier Services

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- DevOps Services Competency
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Contact us

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