

PROBLEM

A global bank needed to **reduce operating expenses, time, and personnel needs** for its intensive anti-money laundering compliance processes.

PROJECT

The DeepNLP™ product automatically sorted and analyzed contracts, **extracting information to support decision-making and speeding up transaction processing.**

RESULTS

The DeepNLP product **reduced human touches needed per transaction by 50%**, thereby reducing operating expenses and risk of error.

THE PROBLEM

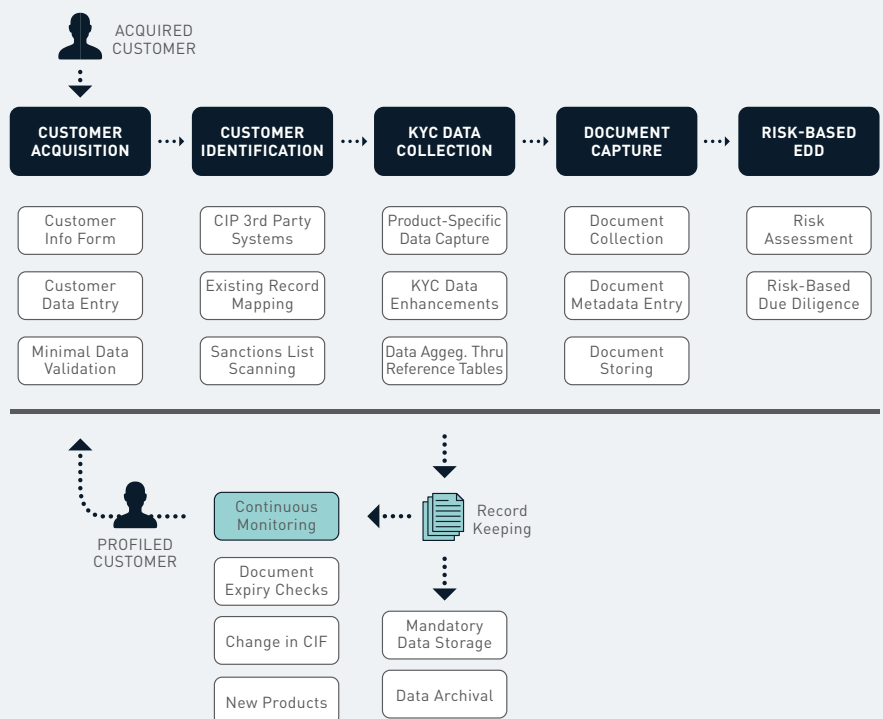
The KYC (or know your customer) process, which banks must go through to verify the identity of clients and remain in compliance with anti-money laundering regulations, is costly and time-consuming. U.S. banks are required to uniquely establish the identity of every entity they transact with, and then report their findings to the U.S. Securities and Exchange Commission. The number of human touches required to complete the KYC process of just one single client is over 1,000. This translates to high operating expenses, large percentages of personnel time, and high risk of costly human errors in the classification and processing of documents. For major banks with large transaction volumes, these risks and expenses are increasingly untenable.

One major global bank was struggling to process its extremely high daily volume of transactions. This bank has over 900,000 contracts under its management, and processes roughly \$3 trillion worth of transactions each day. KYC processing takes up an outsize amount of the bank's time, with each transaction spanning about 72 hours. To improve its operations, it began looking to more innovative solutions, such as machine learning and natural language processing [NLP].

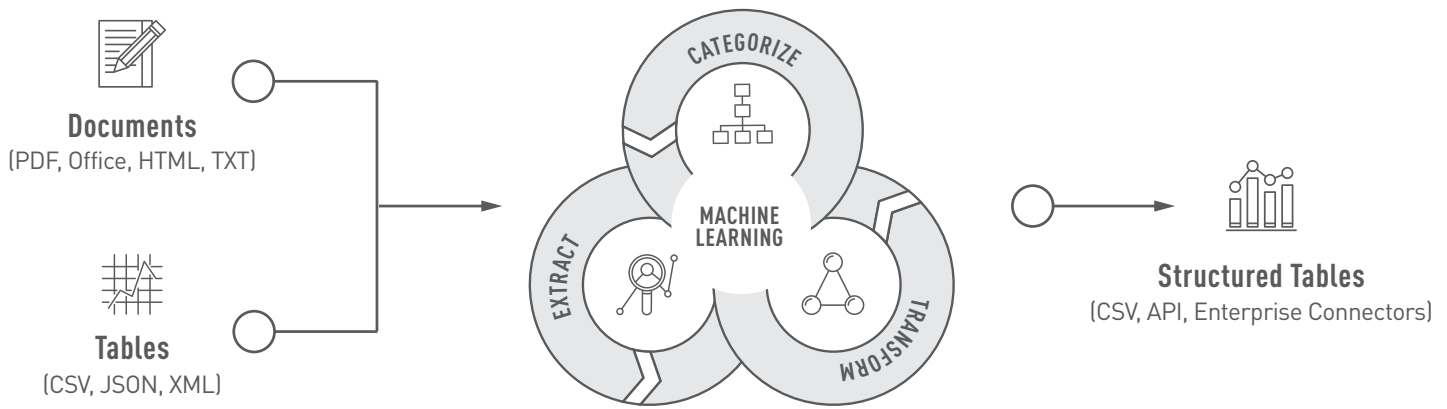
THE SOLUTION

The global bank partnered with SparkCognition, an AI solutions provider, to automate the KYC process. The goal of the project was to greatly reduce the number of human touches required for a transaction; and extract key facts and figures from contracts, which can then be used for rapid analysis or to support decision-making.

THE KNOW YOUR CUSTOMER PROCESS



SOURCE: <https://blogs.oracle.com/financialservices/know-your-customer-moving-beyond-regulatory-compliance>



This was accomplished using SparkCognition's DeepNLP product. The DeepNLP product is a machine learning-powered NLP platform that automates the retrieval of information, classification of documents, and content analytics. Its core functionality is to pull from unstructured, natural language content, such as written documents or images, and transform the information contained in that content into structured data, such as tables or categories.

In this specific case, the DeepNLP product was used to analyze custody contracts, trust deeds, and remote access agreements, many of which were hundreds of pages long. It then located and extracted entities within the documents, clarifying the actors in a given text and their roles and relations to one another. The contracts themselves were automatically sorted into 21 predefined classes for organization and ease of use.

THE RESULTS

By training on 8,000 documents (about 400 per class), the DeepNLP product was able to classify documents with upwards of 95% accuracy. It was also able to reduce human touches in the KYC process by at least 50%. In all, by automating the extraction of information, the DeepNLP product significantly reduced processing time and risk of errors. This system can now be used on the roughly one million contracts under the bank's management, streamlining their processes, reducing operating expenses, and freeing up time and human resources

HOW DEEPNLP PRODUCT WORKS

The DeepNLP product enables organizations to automate workflows of unstructured natural language data through advanced NLP and machine learning techniques. It transforms natural language content into structured data, which can then be used for process automation, decision support

ABOUT SPARKCOGNITION

We catalyze sustainable growth for our clients throughout the world with proven artificial intelligence (AI) systems, award-winning machine learning technology, and a multinational team of AI thought leaders. Our clients partner with SparkCognition to understand their industry's most pressing challenges, analyze complex data, empower decision-making, and transform human and industrial productivity. To learn more about how SparkCognition's AI applications can unlock the power in your data, visit www.sparkcognition.com.