

Artificial Intelligence for processing legal data in the banking sector



NTT DATA's Dolffia solution has automated the extraction of power of attorney data for a major banking group. Thanks to this platform, the client has reduced the average time to process and validate these documents by half.



One of the major banking groups in Spain required a specific solution for processing unstructured data. Specifically, they needed to automate the extraction of information from notarial deeds, a process that was previously carried out manually by professionals with specific expertise to precisely locate and extract the information contained in the documents.

NTT DATA offered this entity the implementation of the Dolffia platform, which is based on AI and natural language learning techniques (NLP). This platform has allowed to automate the process, reducing the time required for this task by half while improving efficiency and reducing costs.

This project is pioneering in the banking sector due to the complexity of correctly extracting the necessary data from complex legal documents.

The client

In the banking sector, a vast amount of data is managed on a daily basis. Some of these data are structured, following a specific database format, while others are not. The client is one of the main banking groups of the Spanish financial system, which is part of the IBEX35 index, required a specific solution for processing unstructured data.

Specifically, they needed to automate the extraction of information from notarial deeds, as in the case of powers of attorney. These processes are carried out manually and require the knowledge of a professional to find and select from the document the details of the natural person who can act in the name and on behalf of a legal person.

For this purpose, NTT DATA implemented Dolffia, a document-processing platform based on AI, Natural Language Processing (NLP), and machine learning techniques.

Thanks to the use of this technology, the client has doubled their capacity for this task, improved efficiency, and reduced costs.

Dolffia is a fast and scalable AI-based documentation processing platform, capable of extracting the salient information they contain at high speed and with high levels of accuracy.





The challenge

Power of attorney and appointment notarial deeds are complex documents because they contain unstructured data (long documents, legal concepts and terminology, various elements such as seals, marks, and signatures, etc.).

The banking client needed to automate the extraction of information from power of attorney deeds (such as names of individuals, national identification numbers, granting or revocation of powers, notary names, etc.) to improve efficiency, reduce errors, and decrease the average processing time. The automation challenge was significant.

The Dolffia solution is able to understand information and learn from it to process this type of documents. Based on Machine Learning (ML), Dolffia can automatically recognise and classify a given document. It uses parallelisation techniques to reduce the time needed to train the algorithms and improve the results.

This is one of the first use cases of Dolffia for processing legal documents. After several tests with machine learning techniques so that the platform could learn to extract knowledge from this unstructured data, the results exceeded expectations.

“It has been a pioneering project in the banking field due to the complexity of power of attorney legal documents. We adapted Dolffia to the legal and notarial terminology and the structure of the deeds. In general, we worked with great precision to achieve the perfection required by the bank.”

Marc Xaus
NTT DATA's Project Manager

The solution

To automate the data retrieval process from notarial deeds, which was previously done manually, NTT DATA offered the implementation of the Dolffia solution to the banking entity.

Dolffia is an AI-based language-processing platform that automatically classifies documents and swiftly and accurately extracts the most important content. It is hosted on Amazon Web Services (AWS), NTT DATA's strategic partner since 2010, and whose alliance demonstrates the leadership of both companies in the development of cloud-based IT solutions.

The NTT DATA solution was able to adapt to the complexity of this type of documents and data in just 8 months. As a cloud-native application, Dolffia has fast configuration processes that allow this type of use cases to be resolved in a matter of days. This Software-as-a-Service solution perfectly fit the needs of the banking entity, which was seeking:

- Speed in processing data and documents.
- Adaptability to extract information from a wide range of document structures.
- Superior accuracy in document classification.
- Return on investment, as it significantly reduces operational costs.
- Elimination of risks associated with lost or incorrectly processed documents.
- Agility in the solution's configuration time.

In addition, Dolffia can be easily integrated with other documentation-generation tools such as ERPs, CRMs, CMDs, RPAs, etc.

Dolffia represents a quantum leap in data management, enabling the delivery of better customer/user experiences thanks to informed decision-making that allow for greater profitability and eliminate inefficiencies in processes.

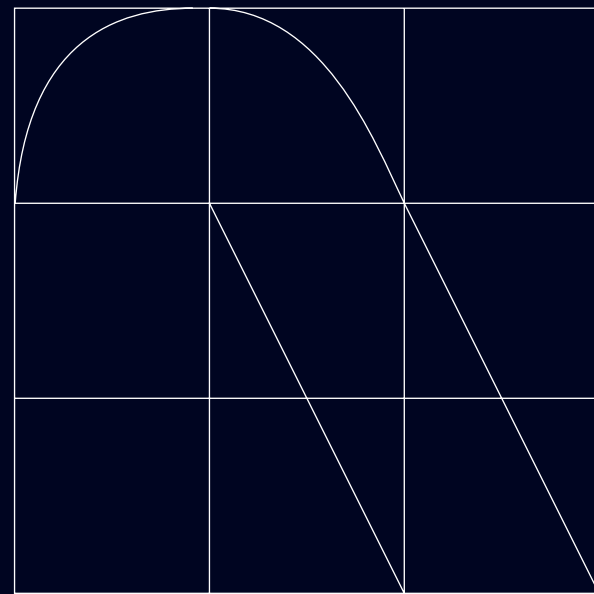
The result

After implementing the Dolffia solution in AWS, the following benefits have been achieved:

- Reduction in average processing time by 30% compared to manual management.
- Cost reduction of approximately 30%.
- Improved efficiency. Correct processing of 84% of the data. The rest, although they may be correct, a professional review is preferred to ensure the certainty of the result.
- Elimination of risks associated with lost or incorrectly processed documents.

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The implementation of Dolffia has allowed the client to double their capacity in processing the data extracted from power of attorney deeds. They now have an automated system that is faster and more efficient, and which has also enabled them to reduce costs by 30%.
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Ignacio Barahona
NTT DATA's Dolffia Product Manager



Next steps

NTT DATA is already studying potential new use cases for this platform in the daily operations of the banking entity. In this sector, like others, there are multiple areas where internal processes require extensive analysis of information. From analysing employment histories to searching for information in public documents, these are practical examples of the banking industry's needs to carry out certain procedures. In these cases, the use of a tool capable of extracting information about customers is particularly relevant.

Why NTT DATA?

NTT DATA, part of Group NTT, is a global innovative company of IT business services headquartered in Tokyo. The company has more than 140,000 professionals, helping its clients in the transformation process through consulting, industrial solutions, commercial process services, digital and IT modernisation, and managed services.

Dolffia is offered by NTT DATA Syntphony, the platform for orchestrating product innovation and commercialization. Syntphony leverages the talent and knowledge of NTT DATA professionals and our experience in delivering integrated, end-to-end solutions that maximize the synergies of the products and technologies.

The key cognitive capabilities of Dolffia were designed and developed at the NTT DATA Center of Excellence for AI, where a team of data scientists and engineers work closely with other AI professionals in the NTT DATA group.

For further information

www.es.nttdata.com

